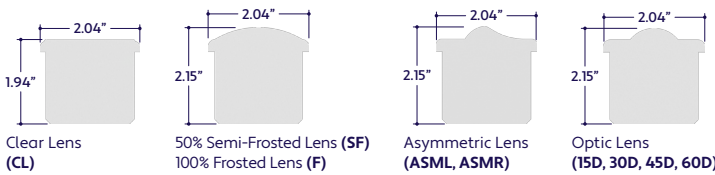


GENERAL FEATURES

Applications	Indirect and Direct Lighting
Lens	Clear, 50% Semi-Frosted, or 100% Frosted
Optics & Asymmetric	15°, 30°, 45°, 60° or Asymmetric Optics
Length	Built to Order (+/- 1/8" Tolerance) See Length Restrictions Table for details
Construction	Aluminum Extrusion
Weight	0.80 lbs per foot
Mounting	Mounting Clips (Sold Separately)
Listing	Dry or Damp Location UL1598, CSA C22.2#250.0 UL8750, CSA250 UL2108, 67.1.9, 60.4, CSA C22.2 #9
Temperature Ratings	Operating / Startup: -20° to 48°C (-4° to 120°F) Storage: -40° to 76°C (-40° to 170°F)

Installation Link

END VIEWS / DIMENSIONS



MINIMUM & MAXIMUM RUNS

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

ELECTRICAL

Dimming	0-10V, DMX, DALI
Luminaire Voltage	120V - 277V (UNV)

SPECIFY PRODUCT CODE | CHOOSE FROM DROP DOWNS

Series	Lens / Optics	Finish	BIOS LED	Watts per Foot	Dimming	Feed Point	Listing	Luminaire Voltage ¹¹	Luminaire Length
A1-ZAFU-STN-BIOS								UNV	
ZAFU Standard BIOS Illuminated (A1-ZAFU-STN-BIOS)	Clear Lens (CL)	Natural Silver (NA) ²	BIOS Biological Static: 3500K Daytime ³ (BS-35K)	1.5 Watts (1.5W) 232 Lumens / ft ⁶	0-10V (10V)	End Feed ⁴ (EF)	Indoor (DRY)	120 - 277V Line Voltage (UNV)	Specify Length in Feet & Inches Example: 7'8"
	50% Semi-Frosted Lens (SF)	White (WH)		2 Watts (2W) 310 Lumens / ft ⁶		Bottom Feed (BF)			
	100% Frosted Lens (F)	Satin (SA)	BIOS Biological Dynamic: 3500K Daytime - 3000K Evening ⁴ (BD-35K-30K)	3 Watts (3W) 465 Lumens / ft ⁶	DALI (DALI)	Side Feed Left (SFL) Side Feed Right ⁸ (SFR)	Outdoor (DAMP)		
	Asymmetric Lens Left (ASML)	Black (BK)		4 Watts (4W) 620 Lumens / ft ⁶		Back of Fixture Feed ⁹ (BFF)			
	Asymmetric Lens Right ¹¹ (ASMR)	Silver (SR)	BIOS Biological Tunable: 3500K Daytime - 2700K Evening ⁴ (BT-35K-27K)	5 Watts (5W) 775 Lumens / ft ⁶	DMX-512 (DMX)				
	15° Optics (15D)			6 Watts (6W) 930 Lumens / ft ⁶		Side of Fixture Feed Left ⁷ (SFFL)			
	30° Optics (30D)			8 Watts (8W) 1240 Lumens / ft ⁶		Side of Fixture Feed Right ^{8,9,10} (SFFR)			
	45° Optics (45D)			10 Watts (10W) 1550 Lumens / ft ⁶					
	60° Optics (60D)			12 Watts (12W) 1860 Lumens / ft ⁶					

¹ Default Asymmetric Direction is Right (ASMR) if unspecified.
² Default finish is Natural Silver (NA) if left blank.
³ BIOS Biological Static available in standard 3500K Daytime CCT. Consult factory for other color temperature options.
⁴ BIOS Biological Dynamic available in standard 3500K Daytime - 3000K Evening CCT gamut. Consult factory for other color temperature options.
⁵ BIOS Biological Tunable available in standard 3500K Daytime - 2700K Evening CCT gamut. Consult factory for other color temperature options.
⁶ Lumens per Foot based on 35K CCT LED. Example: 156 Lumens x 4 Watts = 624 Initial Lumens per Foot.
⁷ Default feed point is End Feed (EF) if left blank.
⁸ Default Side Feed direction is Right (SFR) if unspecified.
⁹ 3' Minimum luminaire length for (BFF), (SFFL), and (SFFR) Feed Points.
¹⁰ Default Side of Fixture Feed direction is Right (SFFR) if unspecified.
¹¹ Integral Drivers are sized based on wattage per length. Example: 10' x 3 Watts per Foot = 30 Watts. Driver will be sized based on 30 Watts.



LAMP FEATURES

Lamp Type	BIOS SkyBlue™ LEDs
CRI	> 80
Efficacy*	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
BIOS-BS-35K	Biological Static: 3500K Daytime	156	
BIOS-BD-35K-30K	Biological Dynamic: 3500K Daytime - 3000K Evening	156	60,000 hrs.
BIOS-BT-35K-27K	Biological Tunable: 3500K Daytime - 2700K Evening	156	

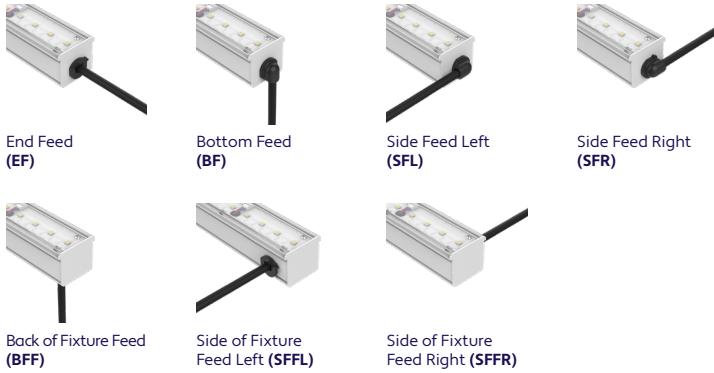
Note: Efficacy is based on 35K CCT LED with Clear Lens (CL).

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.

FEED POINTS

Dry Location Feed Points



Note: Account for the cordgrip dimensions when measuring.

• Add 0.15" for (EF), (BFF), (SFLL), and (SFFR).

• Add 0.55" for (BF), (SFL), and (SFR).

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

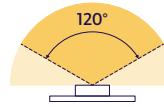


Asymmetric Lens (ASM)
Slight Diode Image
18% Loss Factor

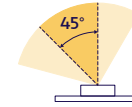


Optic Lens (15D, 30D, 45D, 60D)
Slight Diode Image
18% Loss Factor

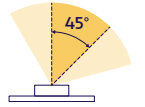
BEAM ANGLES



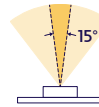
120° x 120° Beam
Clear Lens (CL)
50% Semi-Frosted Lens (SF)
100% Frosted Lens (F)



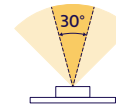
45° x 60° Beam
Asymmetric Lens Left (ASML)



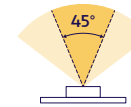
45° x 60° Beam
Asymmetric Lens Right (ASMR)



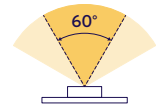
15° x 60° Beam
Optic Lens (15D)



30° x 60° Beam
Optic Lens (30D)



45° x 60° Beam
Optic Lens (45D)

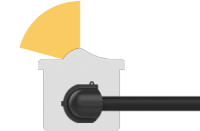


60° x 60° Beam
Optic Lens (60D)

OPTICS ORIENTATION



Asymmetric Lens Right (ASMR)
with Side Feed Right (SFR)



Asymmetric Lens Left (ASML)
with Side Feed Right (SFR)

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

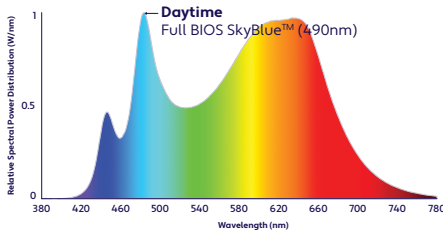
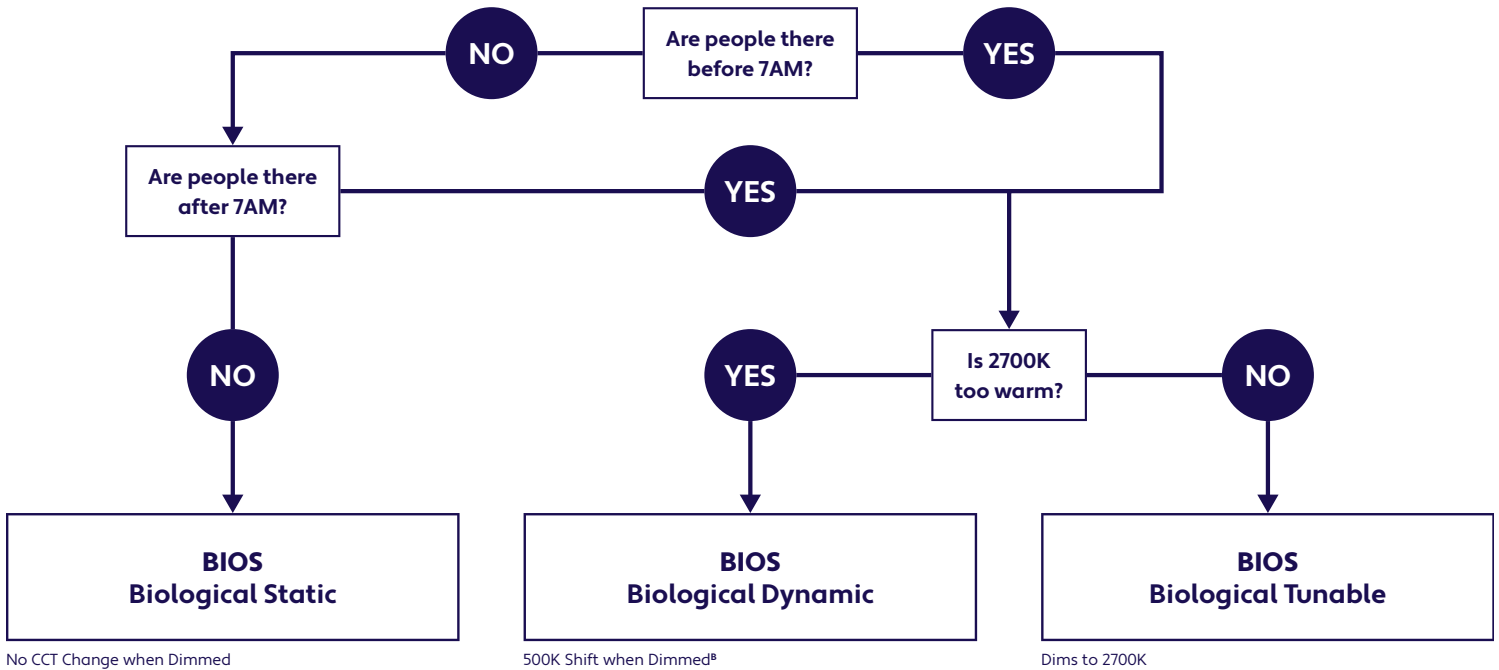
DELIVERED MELANOPIC RATIOS

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).

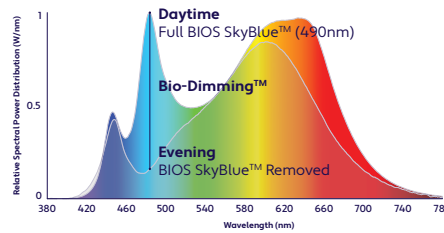
CHOOSING YOUR BIOS SOLUTION

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 .



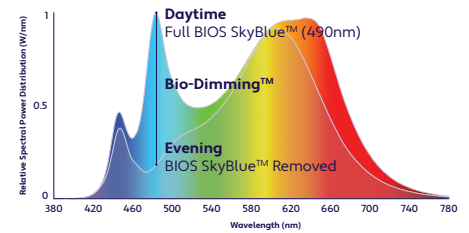
Daytime Solution
 (Offices, Medical / Dental Offices)

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.
 (^B3000K dims to 2700K)

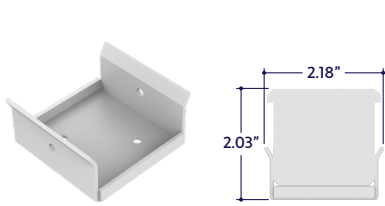


Daytime + Evening Solution
 (Offices, Shiftwork)

Spaces in operation overnight, after 7PM and before 7AM and people do not sleep there. CCT color shift in the evening not preferred.

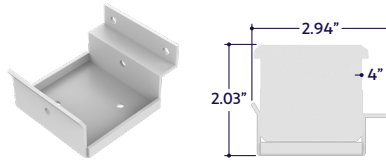
MOUNTING OPTIONS (Sold Separately)

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



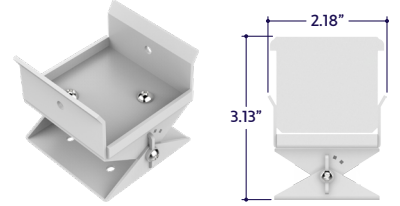
Part #	Qty.
A1-ZAFU-STN-MC-1	

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



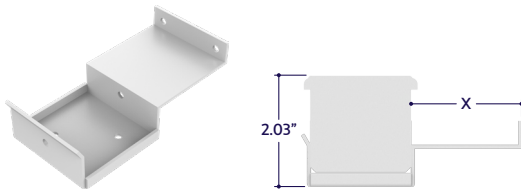
Part #	Qty.
A1-ZAFU-STN-MC-2	

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



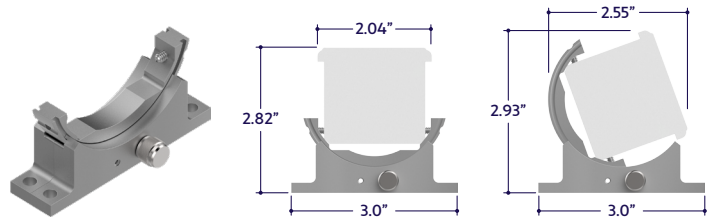
Part #	Qty.
A1-ZAFU-STN-MC-3	

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



Part #	Length	Qty.
A1-ZAFU-STN-MC-4-		

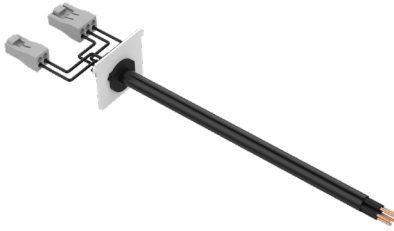
Note: Use 1 mounting clip per 2', rounded up.
 Click on image to see cut sheet for additional details.



Part #	Qty.
A1-ZAFU-STN-MC-PVT	

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

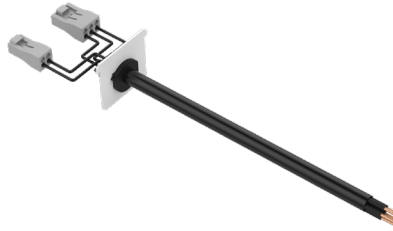
POWER CONNECTORS (Sold Separately)



Dry Power Connector with End Cap
(Biological Static LEDs Only)
(A1-ZAFU-STN-BIOS-PC-B5-EC-CL-DRY-X)
Y = Lens / Optics
X = Specify Cable Length, 6' Default

Part #	Length	Qty.
A1-ZAFU-STN-BIOS-PC-B5-EC-CL-DRY-		
A1-ZAFU-STN-BIOS-PC-B5-EC-SF-DRY-		
A1-ZAFU-STN-BIOS-PC-B5-EC-F-DRY-		
A1-ZAFU-STN-BIOS-PC-B5-EC-ASML-DRY-		
A1-ZAFU-STN-BIOS-PC-B5-EC-ASMR-DRY-		
A1-ZAFU-STN-BIOS-PC-B5-EC-15D-DRY-		
A1-ZAFU-STN-BIOS-PC-B5-EC-30D-DRY-		
A1-ZAFU-STN-BIOS-PC-B5-EC-45D-DRY-		
A1-ZAFU-STN-BIOS-PC-B5-EC-60D-DRY-		

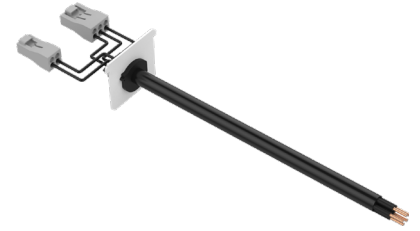
Note: Use 1 Dry Power Connector with End Cap for each dry location power lead.



Dry Power Connector with End Cap
(Biological Dynamic LEDs Only)
(A1-ZAFU-STN-BIOS-PC-BD-EC-Y-DRY-X)
Y = Lens / Optics
X = Specify Cable Length, 6' Default

Part #	Length	Qty.
A1-ZAFU-STN-BIOS-PC-BD-EC-CL-DRY-		
A1-ZAFU-STN-BIOS-PC-BD-EC-SF-DRY-		
A1-ZAFU-STN-BIOS-PC-BD-EC-F-DRY-		
A1-ZAFU-STN-BIOS-PC-BD-EC-ASML-DRY-		
A1-ZAFU-STN-BIOS-PC-BD-EC-ASMR-DRY-		
A1-ZAFU-STN-BIOS-PC-BD-EC-15D-DRY-		
A1-ZAFU-STN-BIOS-PC-BD-EC-30D-DRY-		
A1-ZAFU-STN-BIOS-PC-BD-EC-45D-DRY-		
A1-ZAFU-STN-BIOS-PC-BD-EC-60D-DRY-		

Note: Use 1 Dry Power Connector with End Cap for each dry location power lead.

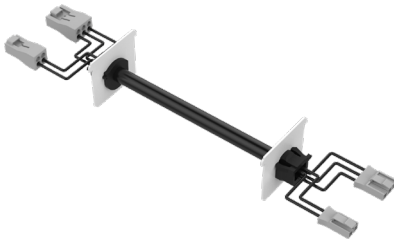


Dry Power Connector with End Cap
(Biological Tunable LEDs Only)
(A1-ZAFU-STN-BIOS-PC-BT-EC-Y-DRY-X)
Y = Lens / Optics
X = Specify Cable Length, 6' Default

Part #	Length	Qty.
A1-ZAFU-STN-BIOS-PC-BT-EC-CL-DRY-		
A1-ZAFU-STN-BIOS-PC-BT-EC-SF-DRY-		
A1-ZAFU-STN-BIOS-PC-BT-EC-F-DRY-		
A1-ZAFU-STN-BIOS-PC-BT-EC-ASML-DRY-		
A1-ZAFU-STN-BIOS-PC-BT-EC-ASMR-DRY-		
A1-ZAFU-STN-BIOS-PC-BT-EC-15D-DRY-		
A1-ZAFU-STN-BIOS-PC-BT-EC-30D-DRY-		
A1-ZAFU-STN-BIOS-PC-BT-EC-45D-DRY-		
A1-ZAFU-STN-BIOS-PC-BT-EC-60D-DRY-		

Note: Use 1 Dry Power Connector with End Cap for each dry location power lead.

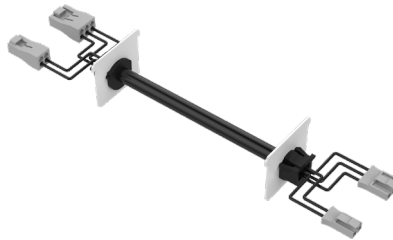
JUMPER CABLES (Sold Separately)



Dry Jumper Cable with End Caps
(Biological Static LEDs Only)
(A1-ZAFU-STN-BIOS-JC-B5-EC-Y-DRY-X)
Y = Lens / Optics
X = Specify Cable Length, 6" Default

Part #	Length	Qty.
A1-ZAFU-STN-BIOS-JC-B5-EC-CL-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-SF-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-F-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-ASML-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-ASMR-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-15D-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-30D-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-45D-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-60D-DRY-		

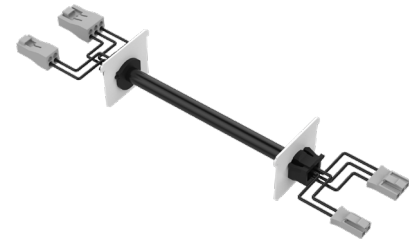
Note: Use 1 Dry Jumper Cable with End Caps for each instance where the run will transverse a corner or an obstacle.



Dry Jumper Cable with End Caps
(Biological Dynamic LEDs Only)
(A1-ZAFU-STN-BIOS-JC-BD-EC-Y-DRY-X)
Y = Lens / Optics
X = Specify Cable Length, 6" Default

Part #	Length	Qty.
A1-ZAFU-STN-BIOS-JC-BD-EC-CL-DRY-		
A1-ZAFU-STN-BIOS-JC-BD-EC-SF-DRY-		
A1-ZAFU-STN-BIOS-JC-BD-EC-F-DRY-		
A1-ZAFU-STN-BIOS-JC-BD-EC-ASML-DRY-		
A1-ZAFU-STN-BIOS-JC-BD-EC-ASMR-DRY-		
A1-ZAFU-STN-BIOS-JC-BD-EC-15D-DRY-		
A1-ZAFU-STN-BIOS-JC-BD-EC-30D-DRY-		
A1-ZAFU-STN-BIOS-JC-BD-EC-45D-DRY-		
A1-ZAFU-STN-BIOS-JC-BD-EC-60D-DRY-		

Note: Use 1 Dry Jumper Cable with End Caps for each instance where the run will transverse a corner or an obstacle.



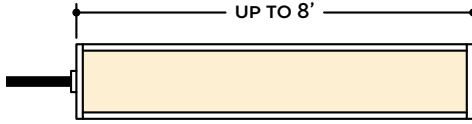
Dry Jumper Cable with End Caps
(Biological Tunable LEDs Only)
(A1-ZAFU-STN-BIOS-JC-BT-EC-Y-DRY-X)
Y = Lens / Optics
X = Specify Cable Length, 6" Default

Part #	Length	Qty.
A1-ZAFU-STN-BIOS-JC-B5-EC-CL-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-SF-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-F-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-ASML-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-ASMR-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-15D-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-30D-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-45D-DRY-		
A1-ZAFU-STN-BIOS-JC-B5-EC-60D-DRY-		

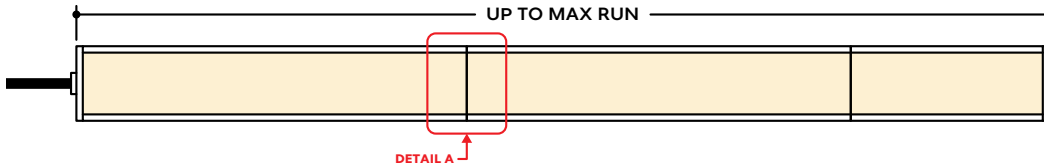
Note: Use 1 Dry Jumper Cable with End Caps for each instance where the run will transverse a corner or an obstacle.

DESIGN GUIDELINES

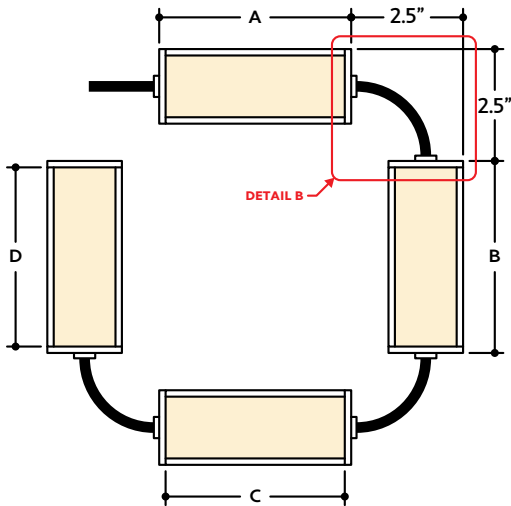
Individual Fixture



Continuous Run (Dry Location)



Run with Square Layout (Dry Location)



KEY

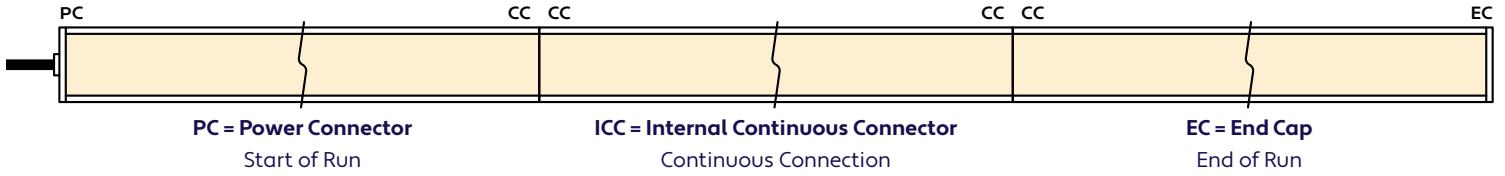
Detail A **Continuous Connection (Dry Location):** Luminaire segments connect using internal continuous connectors, leaving no gaps between segments, with a mounting clip holding the two segments together. Refer to installation instructions for additional information.

Detail B **Dry Jumper Cable:** Used to span a corner or traverse a gap or obstacle in the installation area.

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

CONNECTION SEQUENCE

Dry Location

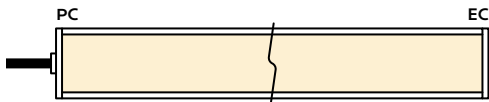


- Specifying a layout is not required to place an order.
- Configuration code applies to full length ordered and will be built per the Continuous Run models on Design Guidelines.
- Connector type subject to change based on availability and listing. Refer to Design Guidelines for details.

HOW TO SPECIFY CONFIGURATIONS

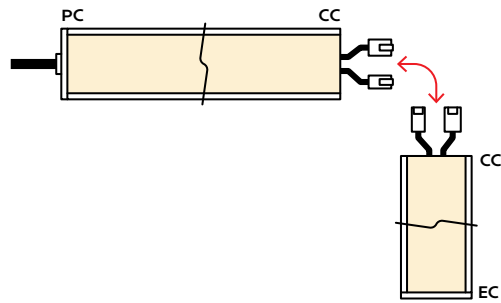
Example: 20' Straight Run

- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-9'-PC-EC



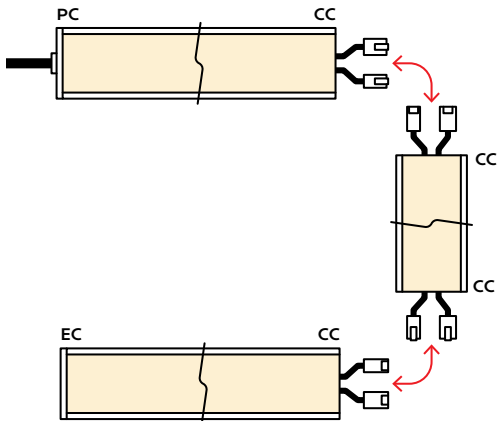
Example: 25' L-Shaped Run

- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-6'-PC-ICC
- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-7'-ICC-EC



Example: 30' U-Shaped Run

- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-6'-PC-ICC
- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-7'-ICC-ICC
- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-6'-ICC-EC



Example: 28' Rectangle Shaped Run

- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-5'-PC-ICC
- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-3'-ICC-ICC
- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-5'-ICC-ICC
- 1x A1-ZAFU-STN-BIOS-CL-NA-BS-35K-10W-10V-EF-DRY-UNV-3'-ICC-EC

