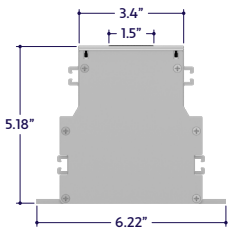


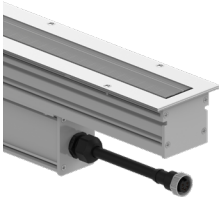
### GENERAL FEATURES

<b>Applications</b>	Ingrade Wall Washing, Wall Grazing, Column Highlighting, Directional Wayfinding Lighting
<b>Lens</b>	Tempered Glass Lens
<b>Optics</b>	10°, 30°, 10° x 60°, 30° x 60°, Asymmetric
<b>Length</b>	Built to Order (1', 2', 3', or 4' Increments)
<b>Construction</b>	Aluminum Extrusion & Stainless Steel
<b>Feed Point</b>	A 1.74" hole is provided on the housing end cap. Use 1-1/4" schedule 40 pipe to bring power into fixtures. Pipe and fittings by others.
<b>Weight</b>	28 lbs (4'), 21 lbs (3'), 14 lbs (2'), 7 lbs (1')
<b>Mounting</b>	Concrete Pour or Hardscape Applications
<b>Listing</b>	Wet (IP67) Location UL1598, CSA C22.2#250.0 UL8750, CSA250 UL2108, 67.1.9, 60.4, CSA C22.2 #9
<b>Temperature Ratings</b>	Operating / Startup: -20° to 48°C (-4° to 120°F) Storage: -40° to 76°C (-40° to 170°F)

### END VIEW / DIMENSIONS



### FEED POINT



**Note:** Refer to the **Configurations** section for details on how fixture segments are assembled in sequence.

- Each starter segment (**PC-CC**) has a 20/5 gauge power lead that connects to conduit. Type and size of conduit and conduit fittings to be determined by installer. Conduit and conduit fittings by others.
- Each middle segment (**CC-CC**) has a continuous connector at each end to connect to the previous and next segments.
- Each end segment (**CC-EC**) has a continuous connector at one end to connect to the previous segment and a dead end at the other.

### ELECTRICAL

<b>Dimming</b>	0-10V, Forward Phase, DMX, DALI
<b>Maximum Run (Line Voltage Integral Driver)</b>	48' (Maximum 12 Fixtures @ 12W)
<b>Luminaire Voltage</b>	120-277VAC ( <b>UNV</b> ) 120V (Forward Phase Dimming Only)

### SPECIFY PRODUCT CODE | CHOOSE FROM DROP DOWNS

Series	Optics	Finish	CCT LED	Watts per Foot	Dimming	Listing	Luminaire Voltage	Luminaire Length <sup>5</sup>
<b>A4-ZERA-ING</b>		<b>STS</b>				<b>IP67</b>		
ZERA Ingrade (A4-ZERA-ING)	Symmetrical Spot: 10° x 10° (10D)	Stainless Steel (STS)	2700K (27K) 3000K (30K)	3 Watts (3W) 267 Lumens / ft* <sup>1</sup>	0-10V: 100% - 1% (10V)	Outdoor IP67 (IP67)	120V - 277V Line Voltage* <sup>4</sup> (UNV)	Specify Length in 1' Increments Example: 22'
	Symmetrical Spot: 30° x 30° (30D)		3500K (35K) 4000K (40K)	5 Watts (5W) 445 Lumens / ft* <sup>1</sup>	0-10V: 100% - 1% (10V-1%)			
	Bi-Symmetrical Grazer: 10° x 60° (10Dx60D)		4500K (45K) 5000K (50K)	6 Watts (6W) 534 Lumens / ft* <sup>1</sup>	DMX-512* <sup>3</sup> (DMX)		120V Line Voltage (Phase Dimming Only) (120V)	
	Bi-Symmetrical Grazer: 30° x 60° (30Dx60D)		5700K (57K) Red (R)	8 Watts (8W) 712 Lumens / ft* <sup>1</sup>	DALI* <sup>4</sup> (DALI)			
	Asymmetric Wall Wash: 10° x 60° (ASM)		Green (G) Blue (B)	9 Watts (9W) 801 Lumens / ft* <sup>1</sup>	Leave Blank for Non-Dimming			
	Marker: 105° x 105° (MKR)		Amber (A)	12 Watts (12W) 1068 Lumens / ft* <sup>1</sup>				

<sup>1</sup> Lumens per Foot based on 35K CCT LED. **Example:** 125 Lumens x 3 Watts = 375 Lumens per Foot.  
<sup>2</sup> Default DMX address of each luminaire is 001. Consult third party DMX commissioner to modify at time of installation. 2' minimum luminaire length  
<sup>3</sup> DALI commissioning to be performed by a third party at time of installation. ALUZ does not provide DALI commissioning. 2' minimum luminaire length  
<sup>4</sup> Integral drivers sized based on wattage per length. **Example:** 4 feet x 3 Watts per foot = 12 Watts. Driver will be sized based on 12 Watts.  
<sup>5</sup> Lengths that deviate from the 1' increment will be sized to the nearest smaller increment.

### LAMP FEATURES

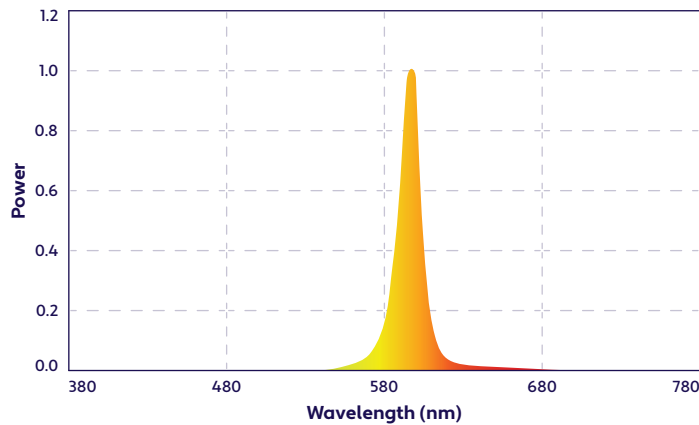
Lamp Type	High Output LEDs (No Mercury)
CRI	> 90
Efficacy	88 Lumens per Watt (Based on 35K CCT LED with 10D Optics)

### LAMP SPECIFICATIONS

Lamp Number	Correlated Color Temperature / Description	Efficacy (Lumens per Watt)	L70 LED Life
24K	2400 Kelvin (Warm White)	88	60,000 hrs.
27K	2700 Kelvin (Warm White)	88	
30K	3000 Kelvin (Warm White)	88	
35K	3500 Kelvin (Neutral White)	88	
40K	4000 Kelvin (Neutral White)	88	
45K	4500 Kelvin (Neutral White)	88	40,000 hrs.
50K	5000 Kelvin (Cool White)	88	
57K	5700 Kelvin (Cool White)	88	
R	Red (621nm)	60	
G	Green (525nm)	139	
B	Blue (470nm)	40	
A	Amber (590nm)	128	

To calculate Delivered Lumens, multiply Efficacy by Watts per Foot.  
**Example:** 89 Lumens per Watt x 3 Watts per Foot = 267 Lumens per Foot.

### SPECTRAL POWER DISTRIBUTION AMBER LED (590nm) TURTLE FRIENDLY



### OPTICAL PERFORMANCE

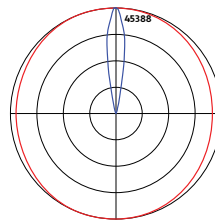
Optic	10D	30D	10Dx60D	30Dx60D	ASM	MKR
Lumens	4093 Lm	4319 Lm	3458 Lm	3907 Lm	3521 Lm	2714 Lm
Efficacy	88 Lm/W	89 Lm/W	71 Lm/W	80 Lm/W	76 Lm/W	56 Lm/W
CRI	> 90	> 90	> 90	> 90	> 90	> 90

Note: Performance is based on 35K CCT LED, 12W, 4' Fixture.

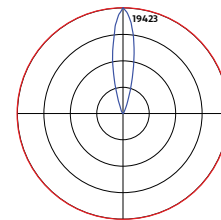
### LUMEN MULTIPLIERS

CCT / Color	27K	30K	35K	40K	45K	50K	57K
Multiplier	.95	.98	0	1.012	1.05	1.07	1.06

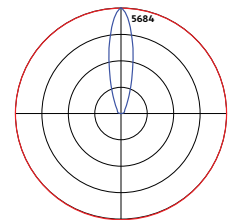
### OPTICAL DISTRIBUTIONS



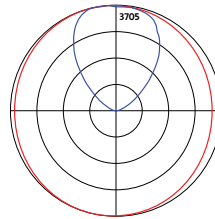
Symmetrical Spot  
Narrow: 10° x 10° (10D)



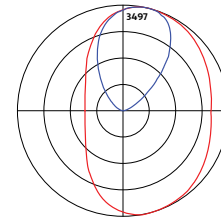
Symmetrical Spot  
Flood: 30° x 30° (30D)



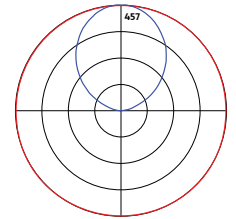
Bi-Symmetrical Grazer  
Narrow: 10° x 60° (10Dx60D)



Bi-Symmetrical Grazer  
Flood: 30° x 60° (30Dx60D)



Asymmetric Wall Wash  
10° x 60° (ASM)



Marker  
105° x 105° (MKR)

### SETBACK & SPACING RECOMMENDATIONS

Optic	Best Use	Setback	Spacing
10D	Wall Grazing	1/20th of Object Height or more	As Required
30D	Wall Grazing	1/10th of Object Height or more	As Required
10Dx60D	Wall Grazing	1/20th of Wall Height or more	Up to the Setback
30Dx60D	Wall Grazing	1/10th of Wall Height or more	Up to the Setback
ASM	Wall Washing	1/10th of Wall Height	Up to 2x the Setback
MKR	Direct View	Not Applicable	As Required

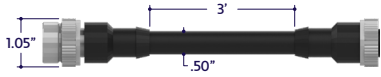
**Setback:** The distance from the fixture to the wall.

**Spacing:** The distance between fixture to fixture.

**Note:** The above recommendations are a starting point for a light design and are not required. Specific design requirements may require further adjustment.

**CONNECTORS (Sold Separately)**

**Note:** Connectors are subject to change without notice.



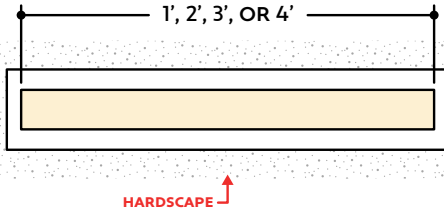
Wet Jumper Cable  
 (A4-ZERA-ING-JC-WET-3')

Part #	Qty.
A4-ZERA-ING-JC-WET-3'	

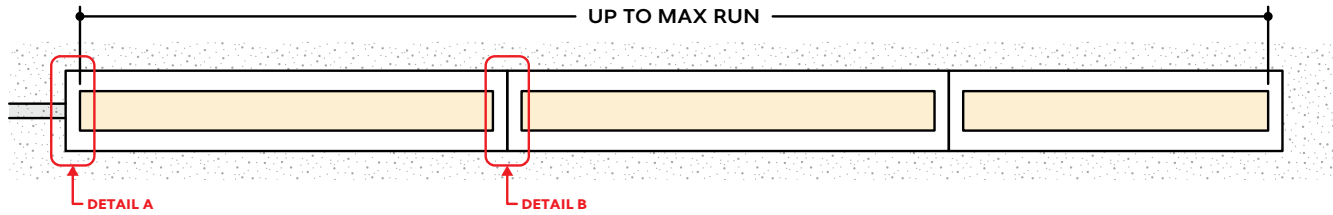
**Note:** Specify 1 Jumper Cable for each instance when there is a gap between luminaires.

## DESIGN GUIDELINES

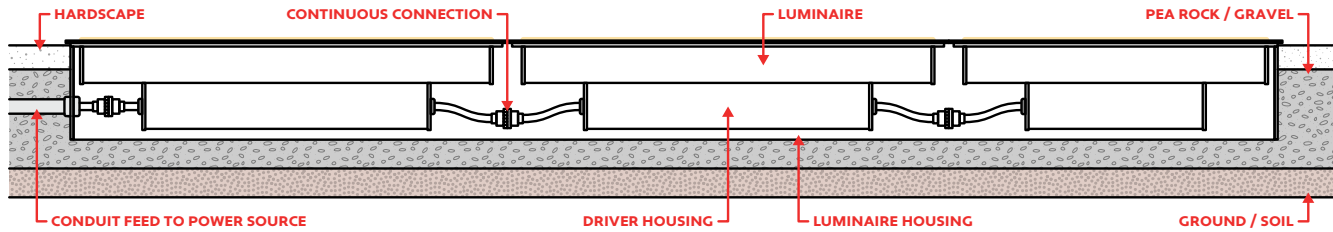
### Individual Fixture



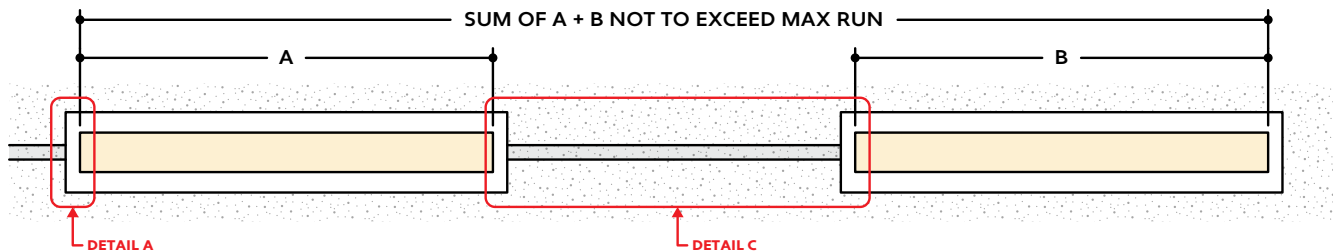
### Continuous Run (Plan View)



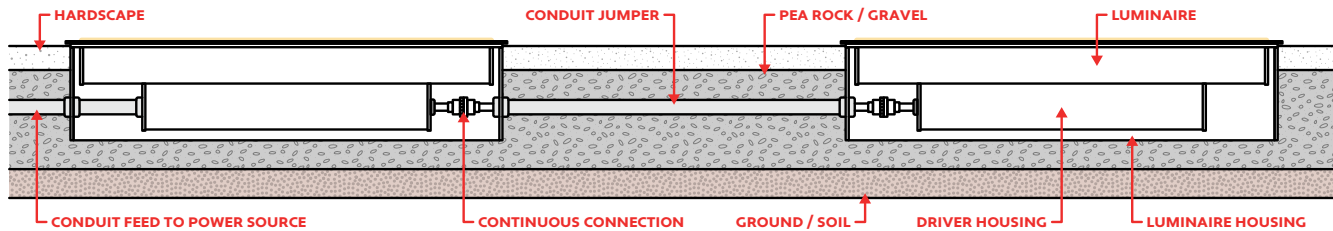
### Continuous Run (Elevation View)



### Run with Jumper Cable (Plan View)



### Run with Jumper Cable (Elevation View)

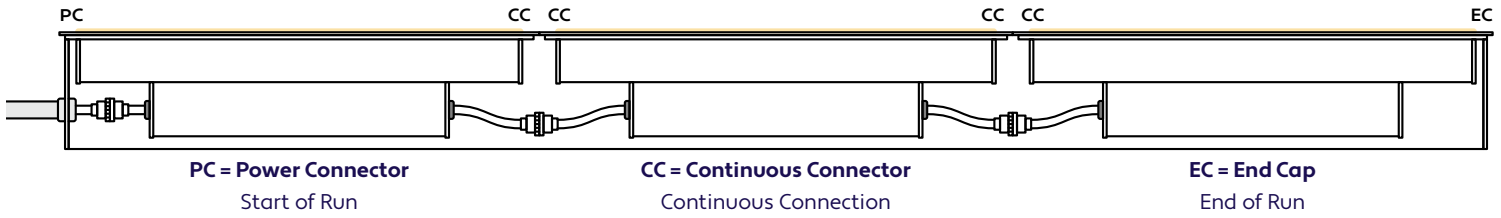


## KEY

- Detail A** **Conduit Power Feed:** Power is fed to the run through the end cap via conduit. Conduit and conduit fittings by others.
- Detail B** **Continuous Connection:** Fixtures are connected in sequence via conduit connection. Conduit and conduit fittings by others.
- Detail C** **Conduit Jumper:** Fixtures are connected to each other, with a gap in between, via conduit jumper. Conduit and conduit fittings by others.

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

## CONNECTION SEQUENCE

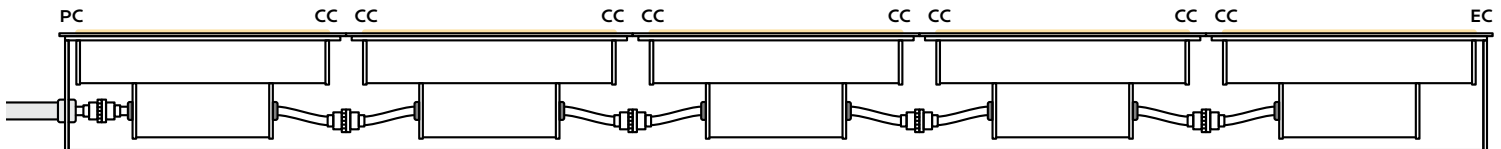


- Specifying a layout is not required to place an order.
- Configuration code applies to full length ordered and will be built per the Continuous Run models on Design Guidelines.
- Connector type subject to change based on availability and listing. Refer to Design Guidelines for details.

## HOW TO SPECIFY CONFIGURATIONS

### Example: 18' Continuous Run

- 1x A4-ZERA-ING-ASM-ST5-35K-8W-10V-IP67-UNV-4'-PC-CC
- 1x A4-ZERA-ING-ASM-ST5-35K-8W-10V-IP67-UNV-4'-CC-CC
- 1x A4-ZERA-ING-ASM-ST5-35K-8W-10V-IP67-UNV-4'-CC-CC
- 1x A4-ZERA-ING-ASM-ST5-35K-8W-10V-IP67-UNV-4'-CC-CC
- 1x A4-ZERA-ING-ASM-ST5-35K-8W-10V-IP67-UNV-2'-CC-EC



### Example: 12' Continuous Run with Space Between Each Fixture

- 1x A4-ZERA-ING-ASM-ST5-35K-8W-10V-IP67-UNV-4'-PC-CC
- 1x A4-ZERA-ING-ASM-ST5-35K-8W-10V-IP67-UNV-4'-CC-CC
- 1x A4-ZERA-ING-ASM-ST5-35K-8W-10V-IP67-UNV-4'-CC-EC

