

Product # \_\_\_\_\_ Type \_\_\_\_\_ Date \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location \_\_\_\_\_ Prepared By \_\_\_\_\_

## LYTESCAPER™ 3

### Construction

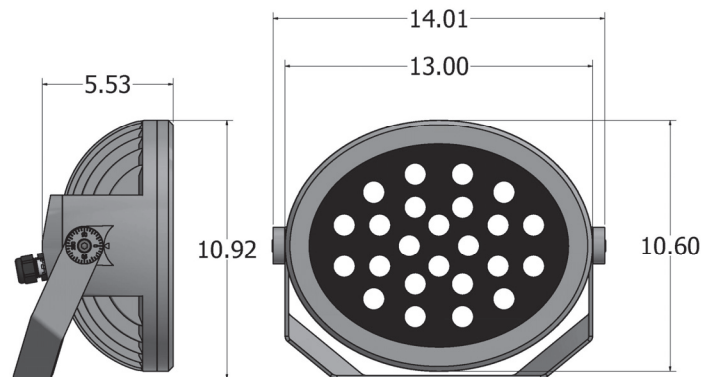
- Housing and lens frame are constructed from heavy-duty low copper die-cast aluminum. Material is structurally rigid and uniformly dissipates heat for longer lumen maintenance life-hours. Standard finish is a mini texture charcoal gray using polyester powder coat paint. Other finishes are available upon request.
- Glass Lens is Minimum 1/8" thick thermal and impact resistant clear tempered glass. Lens frame and housing are sealed using an extruded, memory retentive gasket. All external hardware is stainless steel.
- Mounting Yoke is made from steel and finished with polyester powder coat to match luminaire.

### Optical System

- Largest selection of optical choices shall be available to fit your applications. Please specify your selection from the ordering guide. Photometric Application Data table is provided as an additional tool for selecting an appropriate optic system suitable to the application.
- Glare Control: Choice of external glare control accessories are available. Please select them from the catalog ordering guide.

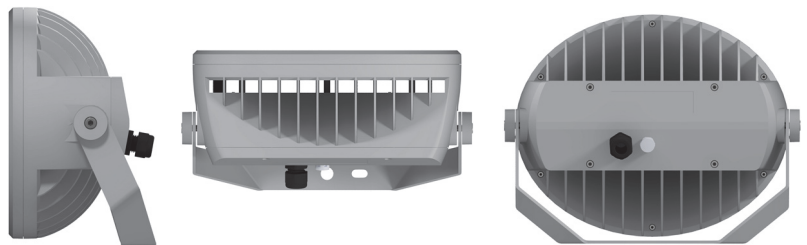
### Product Applications

- High Power Flood Lighting
- Very Narrow Flood Lighting
- Stay Cable Bridge Lighting
- Building Wall Washer
- Cold Environment Flood Lighting
- Vibration Resistant Flood Lighting



**Fixture EPA: 0.9 sq. ft.**  
Weight: 15 lbs.

LED configuration shown for illustration purposes only.  
Actual LED configuration may be different.



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## Electrical Components

- **North Star AlphaLED™ Engine:** Designed and configured with Cree high power, high lumen, consistent CCT LEDs. AlphaLED™ modules enable North Star to deliver high quality standards and ensure warranty replacement. LED modules mounted directly on the highly conductive aluminum die-cast housing. These LEDs are operating below 85°C case temperature and deliver superior maintained illumination per LM80 L80 standards. Please refer to the LED Performance Data table for the targeted LED illumination life at 25°C to 40° C luminaire outside ambient temperature. The choice of color temperatures (3000K, 4000K and 5000K) are available to match your intended application.
- **LED Drivers:** UL/CSA recognized component to meet UL8750 & EN61347 (USR/CNR -E328335). Suitable for input power at 120-277VAC 50/60Hz. See Rated input power table for input voltage and current ratings.
- **Power connection:** A 6-foot long outdoor rated water and oil resistant cable shall be provided for electrical power and dimming data connections. Wiring is to be connected to the nearest junction box (By Others).

## Mounting

- Adjustable aim and lock type yoke is provided with a 0.61 inch diameter center hole and two horizontal slots to mount on horizontal or vertical surface depending on application. The yoke is made of Steel and finished powder coat to match luminaire finish.

## Dimming Controls

- Standard: Interface for 0 – 10V Dimming (Dim-to-Off)
- Optional: Interface for DMX or DALI protocol  
DMX deep dimming to less than 1%

Refer to ordering guide for dimming selection

## Safety Compliance

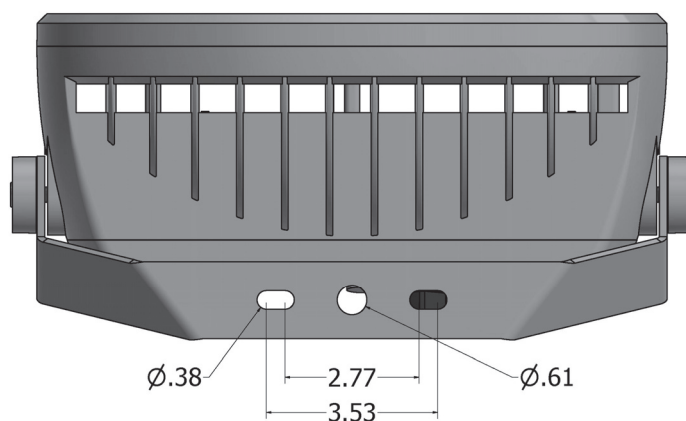
- UL 1598 and CSA C22.2 NO. 250.0 standards.
- Suitable for indoor/outdoor wet (IP66) or damp location use.
- 3G ANSI C136.31 vibration testing (suitable for use on bridges)
- IK07 impact resistant
- Operating Temperature Range: -40 C° to 40 C°

## Warranty

- Limited 5 years
- LED: L80 60,500 hours at 40 C° ambient
- LED Driver: limited 5 years

## Mounting Options

### Yoke Mounting Dimensions

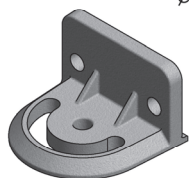


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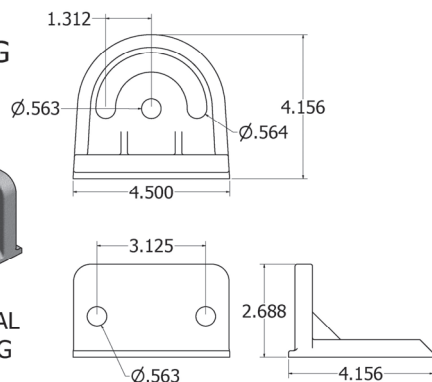
# LYTESCAPER™ 3

## Mounting Accessories

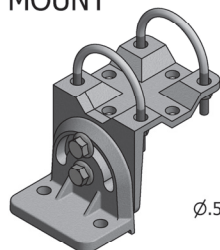
### SB-2 MOUNTING BRACKET



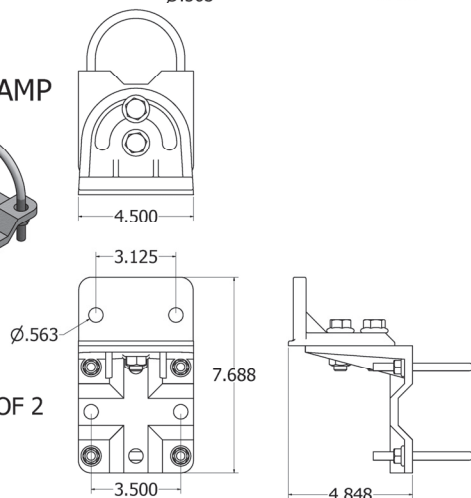
FOR HORIZONTAL YOKE MOUNTING



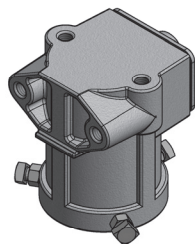
### SB-3 PIPE CLAMP MOUNT



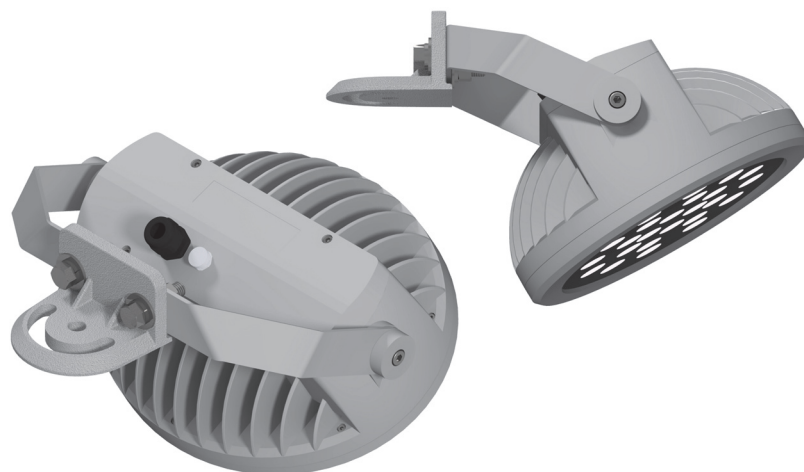
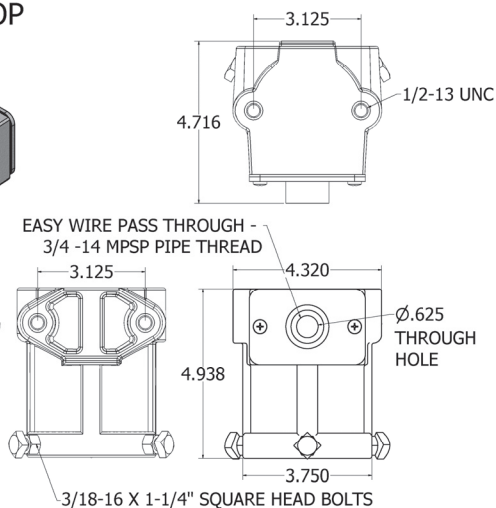
FOR PIPE SIZES OF 2 TO 3 INCHES



### SB-5 POLE TOP SLIP-FITTER



FITS 2" TO 2-1/2" PIPE (2 3/8" TO 2 7/8" OD)



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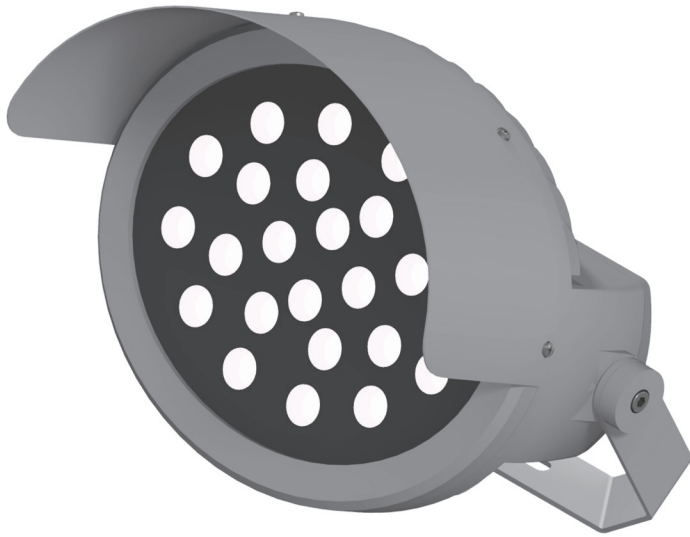


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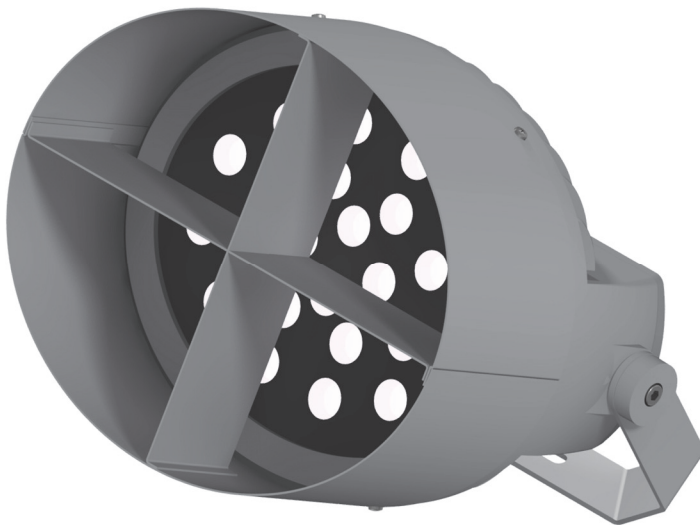
## Glare Control Accessories



V – Visor



H – Hood



CL – Cross  
Louver Hood

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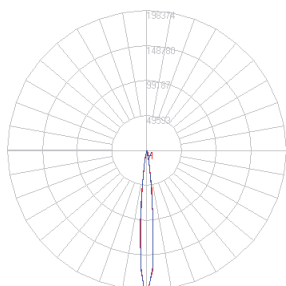
## Beam Information

### Targeted LED Performance

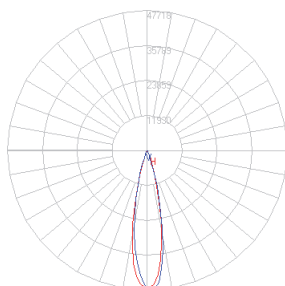
#### LUMINAIRE DATA @ 85 DEGREE C. Tj

#### Cree LM80 Projected Life Hours per IESNA TM21.

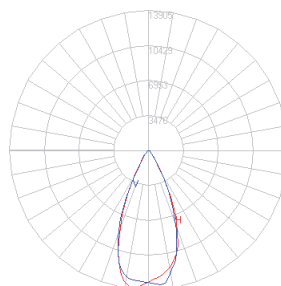
| BASIC MODEL NO | Number of LEDs | LED Color Temp. | LED Watts | Output Lumens | At 25-degree C, Luminaire Ambient |             | At 40-degree C, Luminaire Ambient |             |
|----------------|----------------|-----------------|-----------|---------------|-----------------------------------|-------------|-----------------------------------|-------------|
|                |                |                 |           |               | L90(8.5K) Life Hours              | Ts-Degree C | L90(8.5K) Life Hours              | Ts-Degree C |
| LSP-3          | 24             | 5000            |           | 9373          |                                   |             |                                   |             |
|                | 24             | 4000            | 75        | 8927          | Greater than 51,400               | Under 85    | Greater than 51,400               | Under 85    |
|                | 24             | 3000            |           | 8481          |                                   |             |                                   |             |
| LSP-3          | 24             | 5000            |           | 6778          |                                   |             |                                   |             |
|                | 24             | 4000            | 49        | 6456          | Greater than 51,400               | Under 85    | Greater than 51,400               | Under 85    |
|                | 24             | 3000            |           | 6133          |                                   |             |                                   |             |



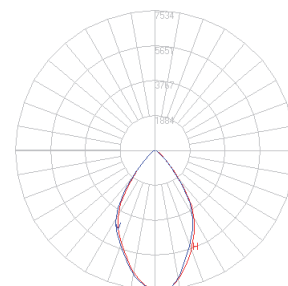
Narrow 10° – D10



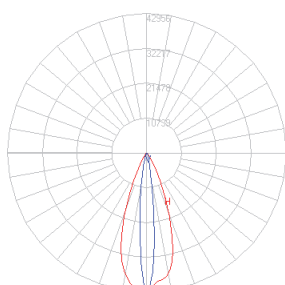
Medium 23° – D23



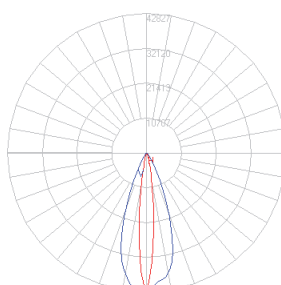
Wide 45° – D45



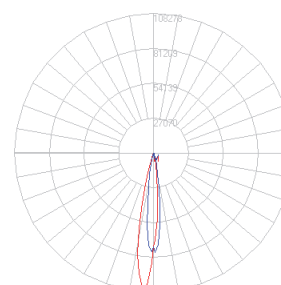
Very-Wide 63° – D63



Elliptical Horizontal  
38° x 12° – ELH



Elliptical vertical  
12° x 38° – ELV



Asymmetric – ASY

NOTE: SEE PHOTOMETRIC APPLICATION DATA FOR SPECIFIC BEAM INFORMATION

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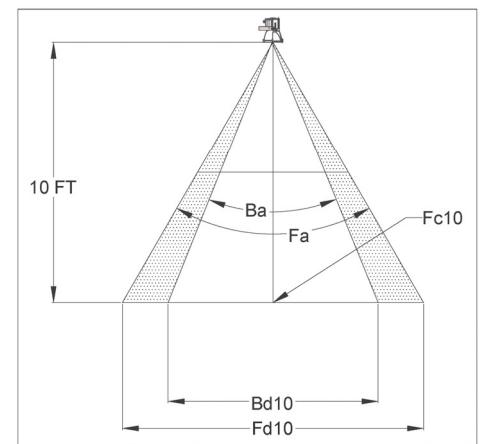
## Photometric Application Data

| Performance Values                       | Optic D10 | Optic D23 | Optic D45 | Optic D63 | Optic ELH    | Optic ELV    |
|------------------------------------------|-----------|-----------|-----------|-----------|--------------|--------------|
| NEMA Classification                      | 2HX2V     | 3HX3V     | 4HX4V     | 5HX5V     | 4HX2V        | 2HX4V        |
| Maximum Center Candela Cd-max            | 198,374   | 47,718    | 13,905    | 7,534     | 42,956       | 42,956       |
| Maximum Center Fc @10 ft - Fc10          | 1984      | 477       | 139       | 75        | 430          | 430          |
| Beam Angle @ 50% of Max. Fc - Ba degrees | 10.2      | 23        | 45        | 63        | 38 x 12      | 12 x 38      |
| Field Angle @ 10% of Max Fc - Fa degrees | 19.6      | 39        | 69        | 96        | 61 x 26      | 26 x 61      |
| Beam Diameter in feet @10 ft - Bd10      | 1.78      | 4.07      | 8.28      | 12.26     | 6.89 x 2.10  | 2.10 x 6.89  |
| Field Diameter in feet @10 ft - Fd10     | 3.45      | 7.08      | 13.74     | 22.21     | 11.78 x 4.62 | 4.62 x 11.78 |

## Photometric Conversion Table

This table is used to convert candela and footcandle values listed in the photometric files for this

| MODEL NO | Number of LEDs | LED Color Temp. | LED Watts | Output Lumens | Conversion Multiplier - 4k to 3k or 5k for candela and foot candle values |
|----------|----------------|-----------------|-----------|---------------|---------------------------------------------------------------------------|
| LSP3     | 24             | 5000            | 75        | 9373          | 1.050                                                                     |
|          | 24             | 4000            |           | 8927          | 1.000                                                                     |
|          | 24             | 3000            |           | 8481          | 0.950                                                                     |
| LSP3     | 24             | 5000            | 49        | 6778          | 0.759                                                                     |
|          | 24             | 4000            |           | 6456          | 0.723                                                                     |
|          | 24             | 3000            |           | 6133          | 0.687                                                                     |



## Distance Multipliers for Photometric Application Table (Adjusted from 10 ft values)

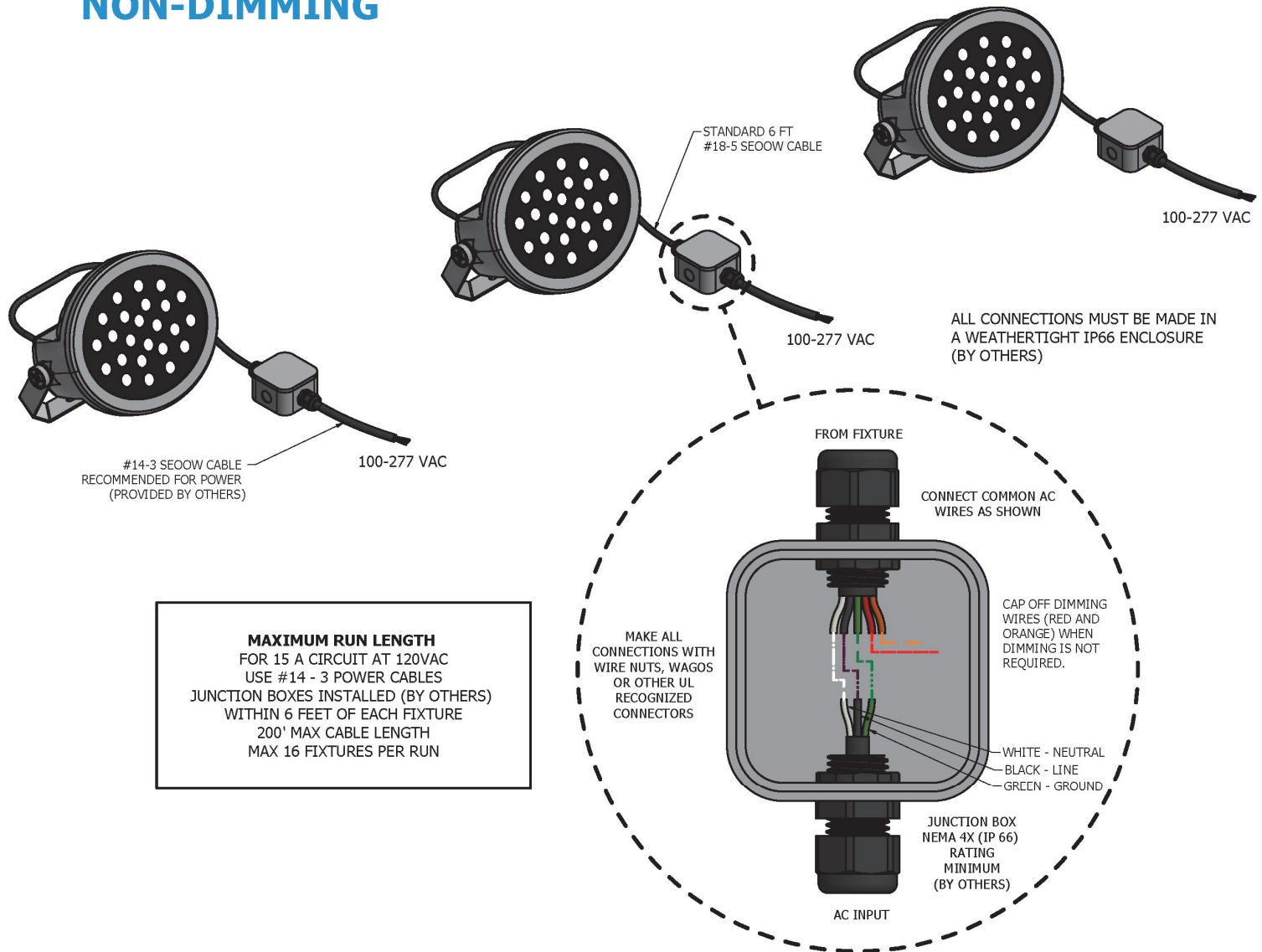
| Distance in feet | Multiplier For Beam (Bd) or Field (Fd) Diameter | Multiplier For Footcandle (Fc) values |
|------------------|-------------------------------------------------|---------------------------------------|
| 10               | 1.00                                            | 1.0000                                |
| 15               | 1.50                                            | 0.4444                                |
| 20               | 2.00                                            | 0.2500                                |
| 25               | 2.50                                            | 0.1600                                |
| 50               | 5.00                                            | 0.0400                                |
| 75               | 7.50                                            | 0.0178                                |
| 100              | 10.00                                           | 0.0100                                |
| 150              | 15.00                                           | 0.0044                                |

## Rated Input Power Table

| LSP3 LED Power | Luminaire Rated input Power (AC 50/60 Hz) | Input Current at rated voltage |     |     |     |
|----------------|-------------------------------------------|--------------------------------|-----|-----|-----|
| Watts          | Watts                                     | 120                            | 208 | 240 | 277 |
| 75             | 86                                        | 0.7                            | 0.4 | 0.4 | 0.3 |
| 49             | 56                                        | 0.5                            | 0.3 | 0.2 | 0.2 |

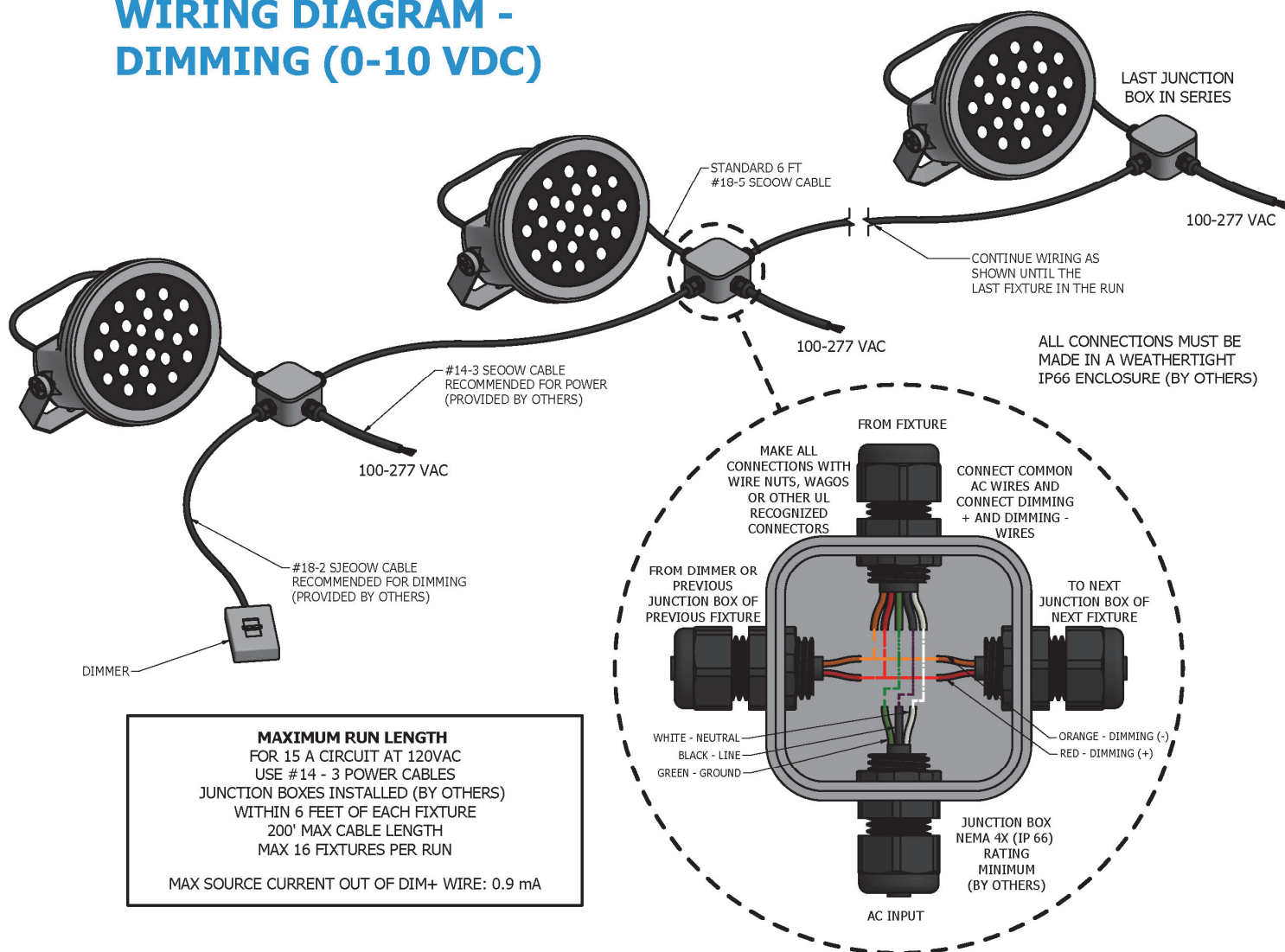
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## WIRING DIAGRAM - NON-DIMMING



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## WIRING DIAGRAM - DIMMING (0-10 VDC)



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# LYTESCAPER™ 3

## Ordering Guide

|  |   |  |   |  |   |  |   |  |
|--|---|--|---|--|---|--|---|--|
|  | - |  | - |  | - |  | - |  |
|--|---|--|---|--|---|--|---|--|

| Model Number | LED Power (Watts) | CCT Color Temperature             | Light Beam Distribution (FWHM)             | Input voltage (VAC) | Lighting Controls                          | Glare Control     |
|--------------|-------------------|-----------------------------------|--------------------------------------------|---------------------|--------------------------------------------|-------------------|
| LSP3         | 75 W              | 3K - 3000 K                       | D10 - 10° Narrow Beam                      | U - 120V-277V       | ND - Non-Dimming                           | V - Visor         |
|              | 49 W              | 4K - 4000 K                       | D23 - 23° Medium Beam                      | V1 - 347V           | DM1 - 1-10 VDC Dimming Interface Only      | H - Hood          |
|              |                   | 5k - 5000 K                       | D45 - 45° Wide Beam                        | V2 - 480V           | DM2 - 0-10 VDC (Dim to Off) Interface Only | CL - Cross Louver |
|              |                   | XK - Specify CCT or single Color* | D63 - 63° Beam                             |                     | DMX - DMX Dimming Interface Only**         |                   |
|              |                   |                                   | ELH - 38° x 12° Elliptical Horizontal Beam |                     | DXD - DMX Deep Dimming - Less than 1%**    |                   |
|              |                   |                                   | ELV - 12° x 38° Elliptical Vertical Beam   |                     |                                            |                   |
|              |                   |                                   | ASY - Asymmetric Beam                      |                     |                                            |                   |

\*Requires minimum 50 quantity and will have a minimum 10-week lead-time.

\*\*Contact North Star Lighting for Availability and lead-times.

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