

Product # _____ Type _____ Date _____

Project Name _____

Project Location _____ Prepared By _____

Capella™ 5

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 Stainless 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.

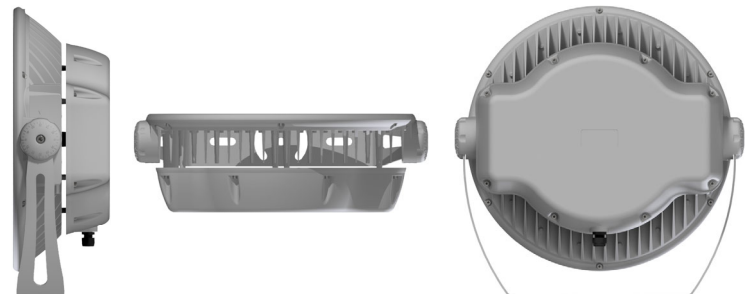
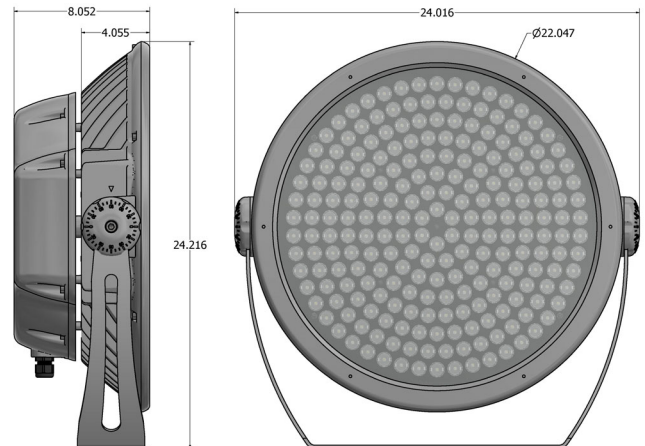
Product Applications

- 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: 3.82 sq. ft.

Weight: 62 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 outdoor rated IP66 junction box (By Others).

Mounting

- Adjustable aim and lock type yoke is provided with a 0.563 diameter center hole, two 60-degree slots, and two horizontal slots to mount on horizontal or vertical surface depending on application. The yoke is made of Stainless 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

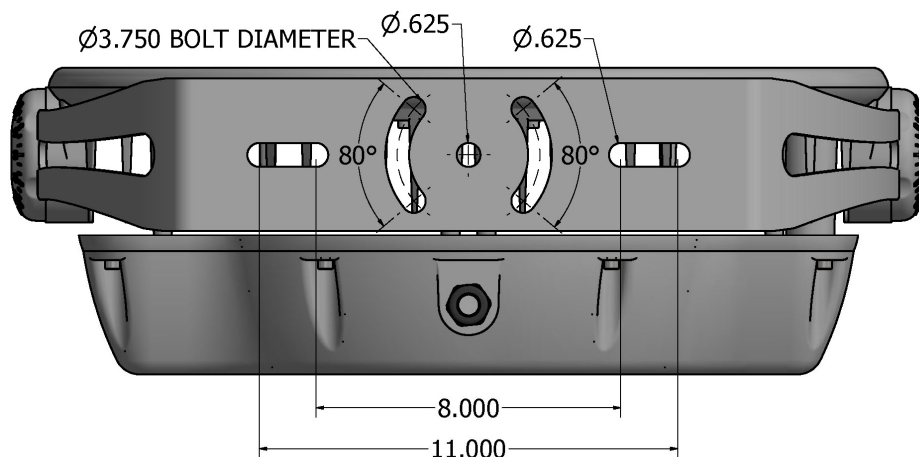
- UL 1598 and CSA C22.2 NO. 250.0 standards.
- Suitable for indoor/outdoor wet (IP66) or damp location use.
- Suitable for 3G ANSI C136.31 Bridge and Tunnel applications.
- IK07 impact resistant
- Operating Temperature Range: -40 C° to 40 C°

Warranty

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

Mounting Options

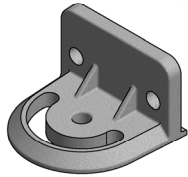
Yoke Mounting Dimensions



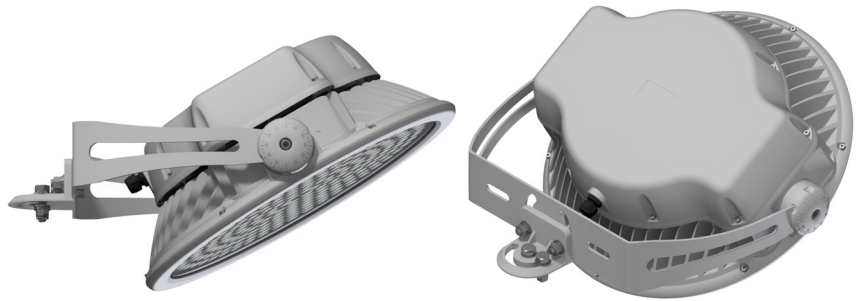
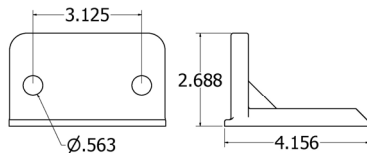
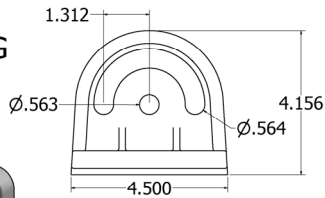
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Mounting Accessories

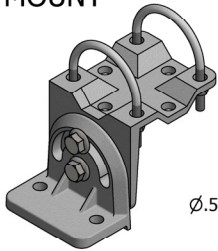
SB-2 MOUNTING BRACKET



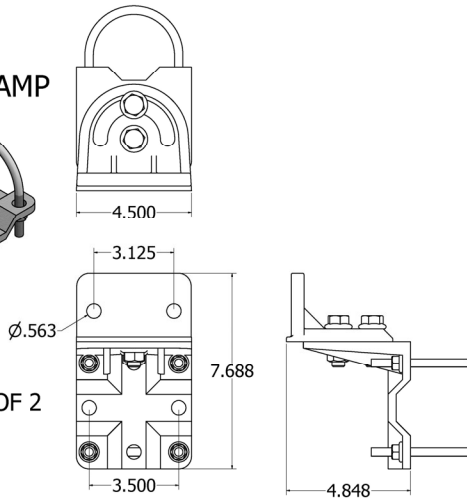
FOR HORIZONTAL YOKE MOUNTING



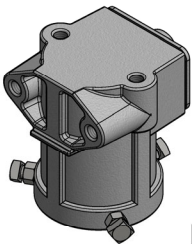
SB-3 PIPE CLAMP MOUNT



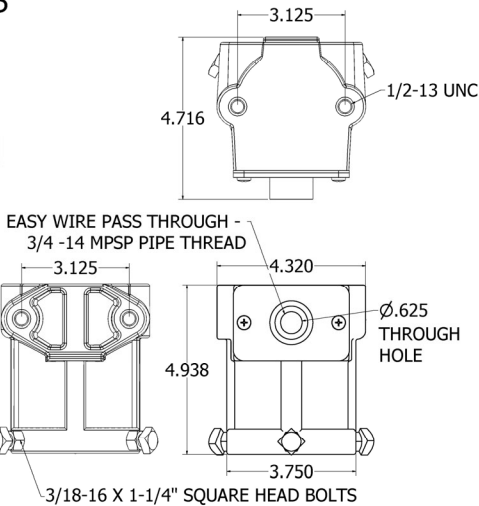
FOR PIPE SIZES OF 2 TO 3 INCHES



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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Glare Control Accessories



SV – Standard Visor



V – Visor



H – Hood

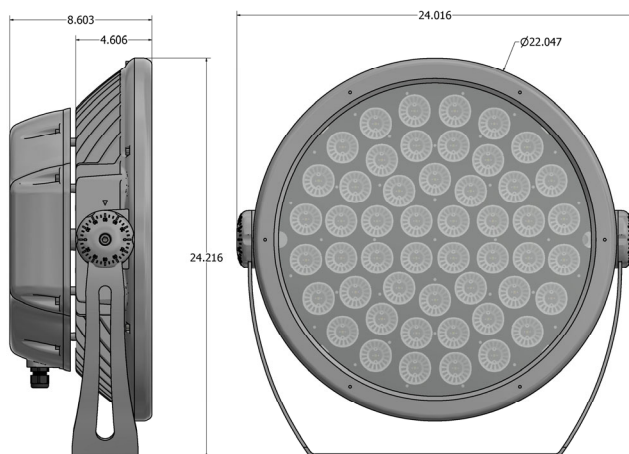


CL – Cross
Louver Hood



CR – Concentric
Ring Louver Hood

Ultra-Narrow Beam Construction



For Ultra-narrow applications, surpassing 2.1 million Center Candela. D06 (444W) beam option only.

LED configuration shown is for illustration purposes. Actual LED configuration may differ.



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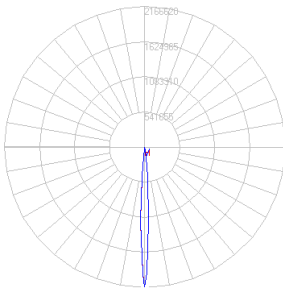
Beam Information

Targeted LED Performance

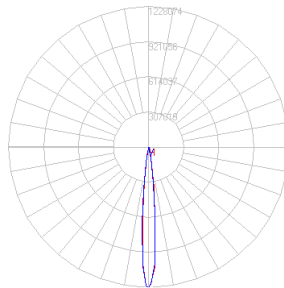
LUMINAIRE DATA @ 85 DEGREE C. Tj

Cree LM80 Projected Life Hours per IESNA TM21.

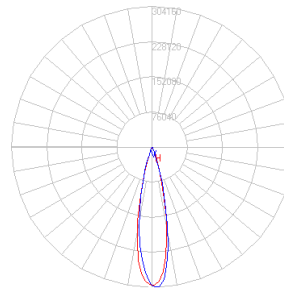
BASIC MODEL NO	Number of LEDs	LED Color Temp.	LED Watts	Output Lumens	At 25-degree C, Luminaire Ambient		At 40-degree C, Luminaire Ambient	
					L90(8.5K) Life Hours	Ts-Degree C	L90(8.5K) Life Hours	Ts-Degree C
CAP-5	224	5000		57440				
	224	4000	407	54705	Greater than 51,400	Under 85	Greater than 51,400	Under 85
	224	3000		51970				
D06 optic, 2.1 million center candela	50	5000		40147				
	50	4000	402	38235	Greater than 60,500	Under 85	Greater than 60,500	Under 85
	50	3000		36323				



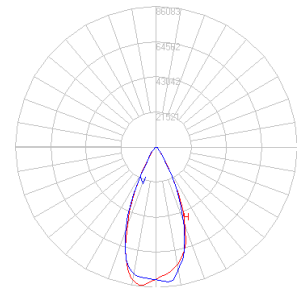
Very-Narrow 6° – D06



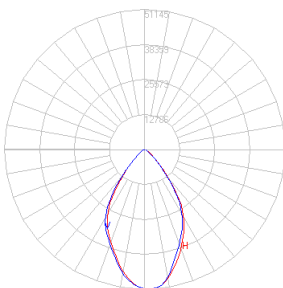
Narrow 10° – D10



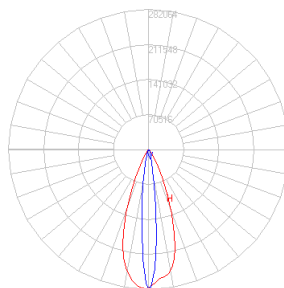
Medium 23° – D23



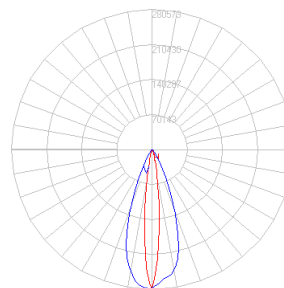
Wide 45° – D45



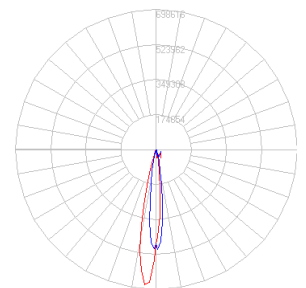
Very-Wide 63° – D63



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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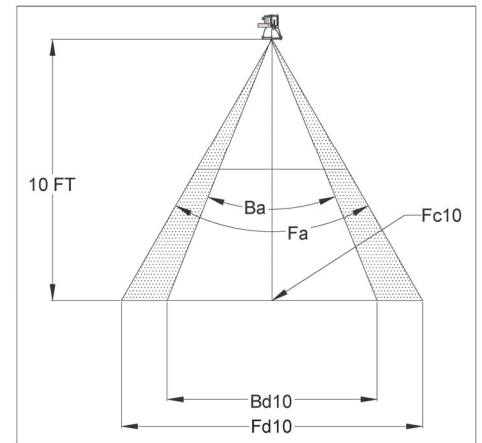
Photometric Application Data

Performance Values	Optic D06	Optic D10	Optic D23	Optic D45	Optic D63	Optic ELH	Optic ELV
NEMA Classification	1HX1V	2HX2V	3HX3V	4HX4V	5HX5V	4HX2V	2HX4V
Maximum Center Candela Cd-max	2166620	1228074	304160	86083	51145	282063	280573
Maximum Center Fc @10 ft - Fc10	21666	12281	3042	861	511	2821	2806
Beam Angle @ 50% of Max. Fc - Ba degrees	6	10.2	23	45	63	38 x 12	12 x 38
Field Angle @ 10% of Max Fc - Fa degrees	13	19.6	39	69	96	61 x 26	26 x 61
Beam Diameter in feet @10 ft - Bd10	1.05	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	2.28	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
CAP5	224	5000	407	57440	1.050
	224	4000		54705	1.000
	224	3000		51970	0.950
CAP5 - D06 beam	50	5000	402	40147	1.050
	50	4000		38235	1.000
	50	3000		36323	0.950



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

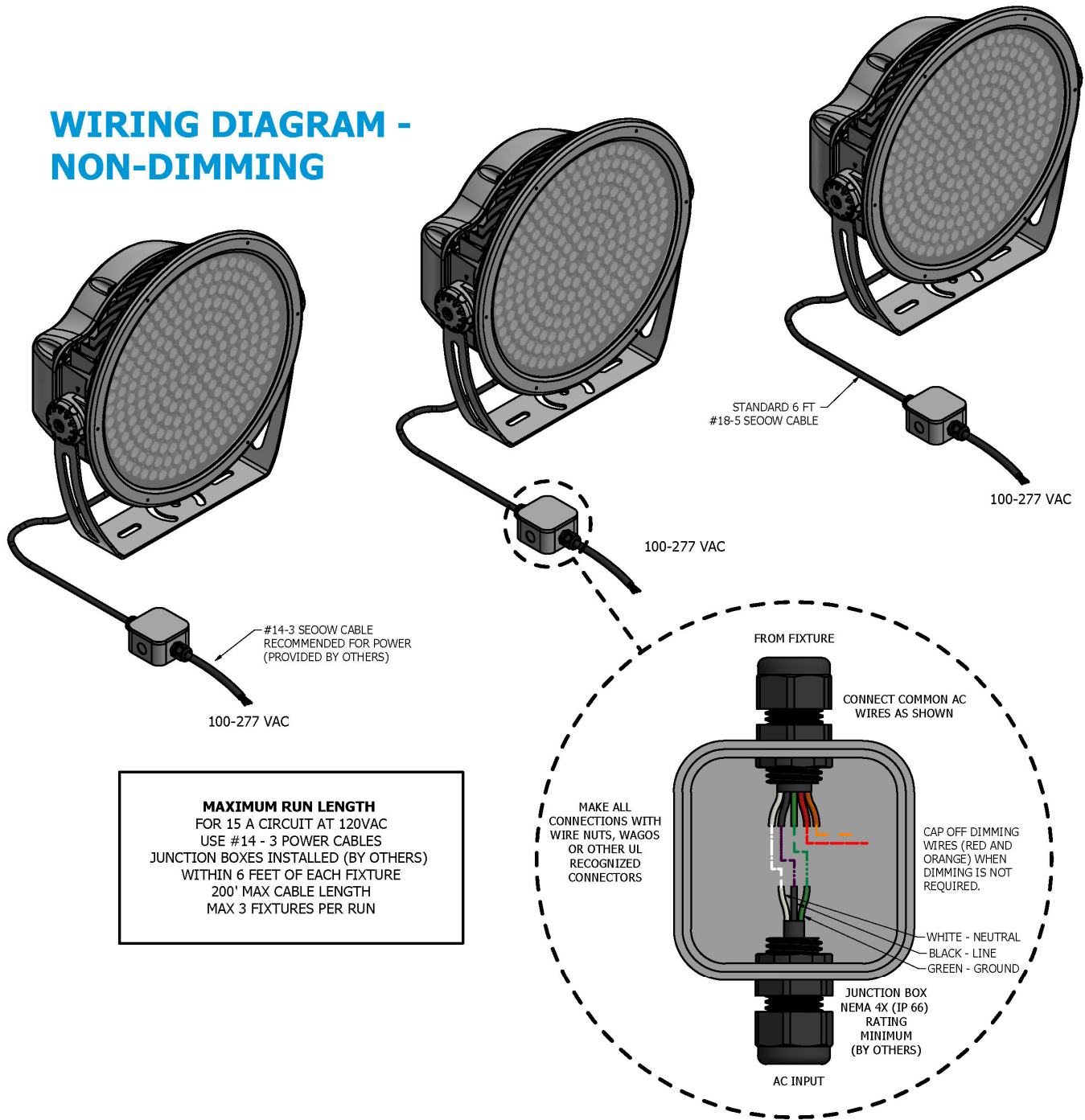
Distance in feet	Multiplier For Beam (Bd) or Field (Fd) Diameter	Multiplier For Footcandle (FC) values
10	1.00	1.0000
15	1.50	0.4444
20	2.00	0.2500
25	2.50	0.1600
50	5.00	0.0400
75	7.50	0.0178
100	10.00	0.0100
150	15.00	0.0044

Rated Input Power Table

CAP5 LED Power	Luminaire Rated input Power (AC 50/60 Hz) (2- 320W Drivers)	Input Current at rated voltage			
Watts	Watts	120	208	240	277
407	458	3.8	2.2	1.9	1.7
402	444	3.7	2.1	1.9	1.6

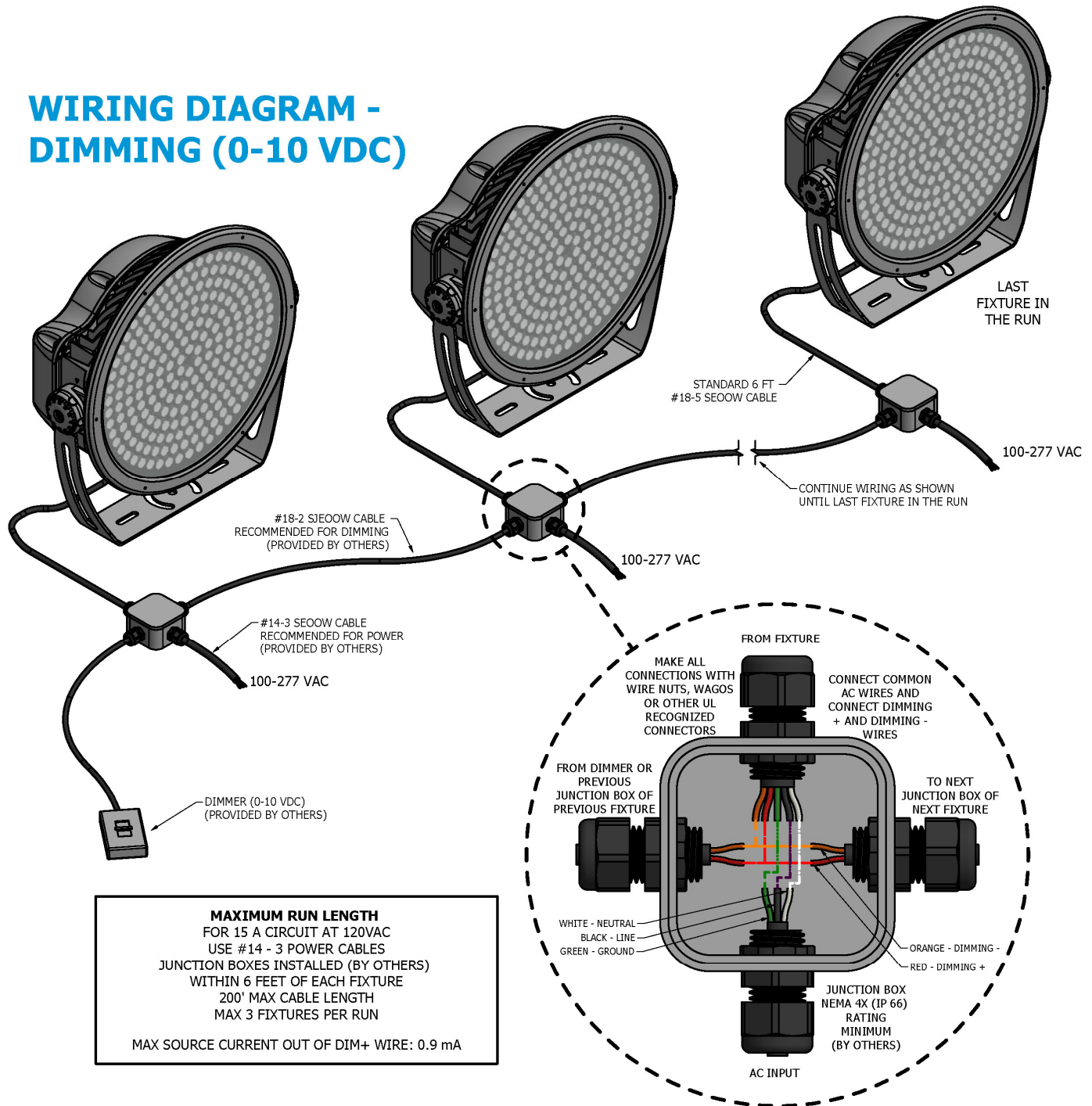
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WIRING DIAGRAM - NON-DIMMING



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WIRING DIAGRAM - DIMMING (0-10 VDC)



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Ordering Guide

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Model Number	LED Power (Watts)	CCT Color Temperature	Light Beam Distribution (FWHM)	Input voltage (VAC)	Lighting Controls	Glare Control
CAP5	458 W	3K - 3000 K	D06 - 6° Very Narrow Beam - 508W Only*	U - 120V-277V	ND - Non-Dimming	SV - Standard Visor
	444 W - D06 Beam Distribution Only*	4K - 4000 K	D10 - 10° Narrow Beam	V1 - 347V**	DM - 0-10 VDC (Dim to Off) Interface Only	V - Visor
		5k - 5000 K	D23 - 23° Medium Beam	V2 - 480V**	DMX - DMX Dimming Interface Only**	H - Hood
		XK - Specify CCT or single Color*	D45 - 45° Wide Beam		DXD - DMX Deep Dimming - Less than 1%**	CL - Cross Louver
			D63 - 63° Beam			CR - Concentric Ring Louver
			ELH - 38° x 12° Elliptical Horizontal Beam			
			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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