

Product # _____ Type _____ Date _____

Project Name _____

Project Location _____ Prepared By _____

Star Beam LED

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 black polyester powder coat paint. Other finishes are available upon request.
- Structurally rigid and robust yoke with pivot adjustment for unconstrained adjustment without large swing.
- All external hardware and components are made of corrosion resistance materials and protective finishes.
- Cleverly engineered heat sink allows natural air to flow between heat fins to optimize thermal management of the LEDs and Optics.
- Modular component assemblies allow for quick replacement.
- Choice of Power – 450 or 600 watts.

Optical System

- Precisely designed modular TIR optics direct light where it is needed, reducing glare and spill light.
- Choice of optical beam distributions - 15°, 30°, 60°, 90° or 120°
- Glare Control: Choice of external glare control accessories are available. Please select them from the catalog ordering guide.

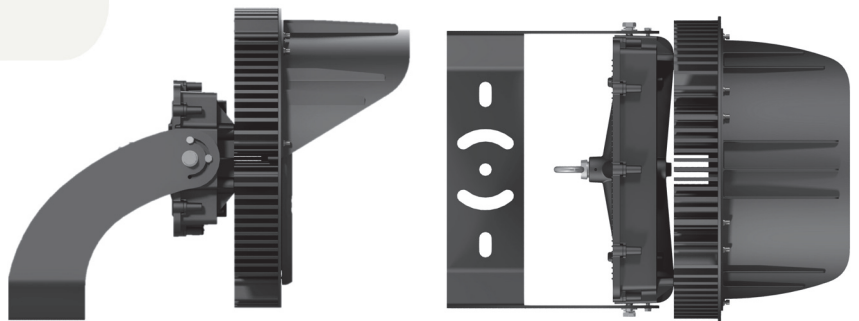
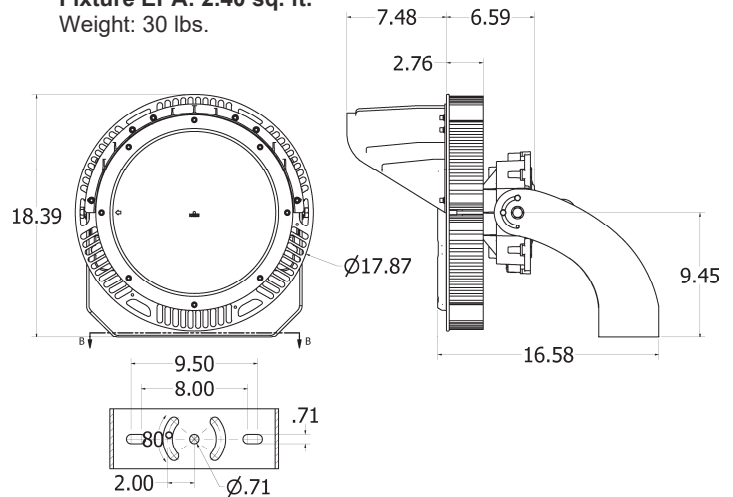
Product Applications

- Sports Stadium Lighting
- Stay Cable Bridge Lighting
- High Power Flood Lighting
- Cold Environment Flood Lighting
- High Mast Lighting
- Vibration Resistant Flood Lighting
- Very Narrow Flood Lighting

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



Fixture EPA: 2.40 sq. ft.
Weight: 30 lbs.



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Electrical Components

- **LED light Engine:** Designed and configured with SEOUL MJT5050 high power, high lumen, consistent CCT LEDs. These modules enable high quality standards and ensure warranty replacement. These LED Module are mounted directly to the highly conductive aluminum die-cast heat-sink. The LEDs operate 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 50° 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

- Choice of three different mounting methods available (Please refer to the ordering guide)
- Adjustable Yoke mounting provides luminaire aiming adjustability for vertical or horizontal aiming.
- 2" Tenon Mount (SB-5) – slip fitter adder to the yoke.
- Clamp Mount on Pipe (SB-3) – Utilizes 2 U-bolts to secure luminaire to 2 to 3 inch diameter pipes.

Dimming Controls

- Standard: Interface for 0 – 10V Dimming

Safety Compliance

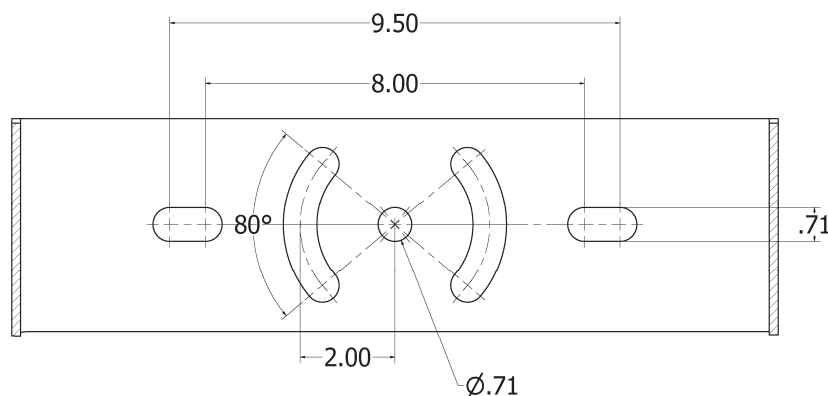
- UL 1598 and CSA C22.2 NO. 250.0 standards.
- Suitable for indoor/outdoor wet (IP66) or damp location use.
- Operating Temperature Range: -40 C° to 50 C°

Warranty

- Limited 5 years
- LED: LM80 60,500 hours at 50 C° ambient
- LED Driver: limited 5 years

Mounting Options

Yoke Mounting Dimensions



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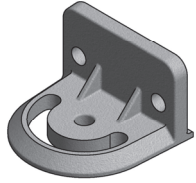


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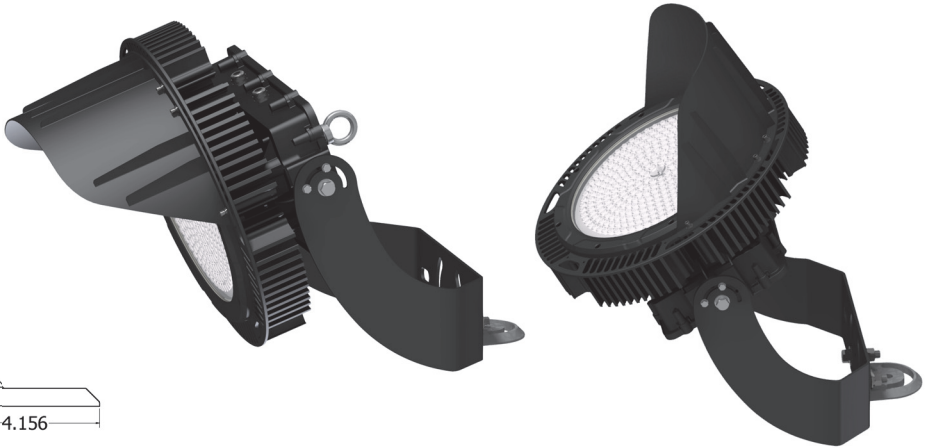
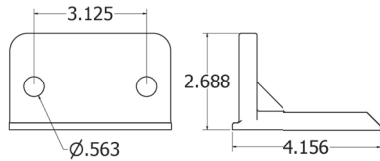
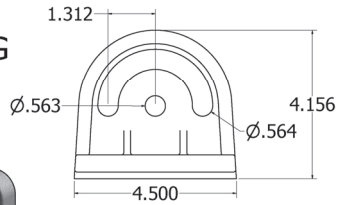
Star Beam LED

Mounting Accessories

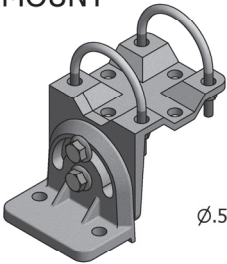
SB-2 MOUNTING BRACKET



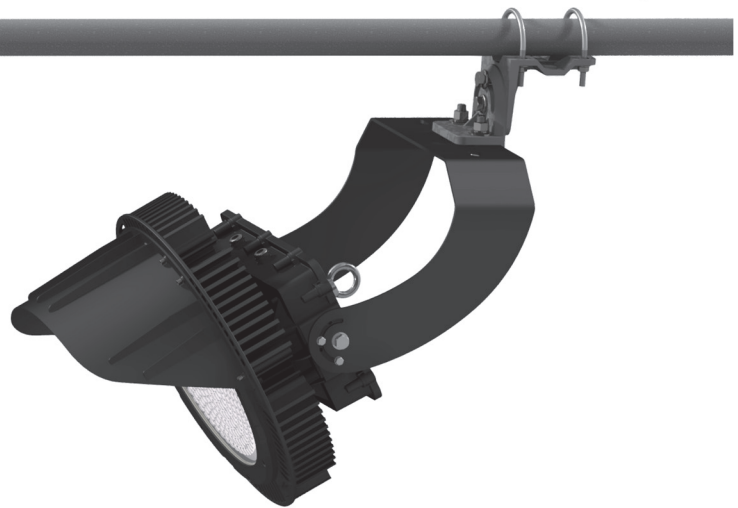
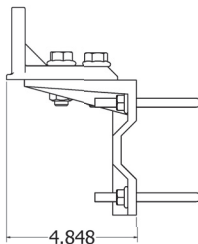
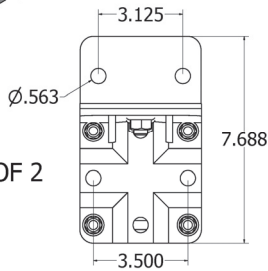
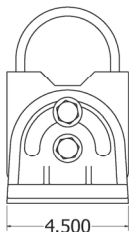
FOR HORIZONTAL
YOKE MOUNTING



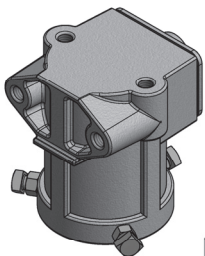
SB-3 PIPE CLAMP MOUNT



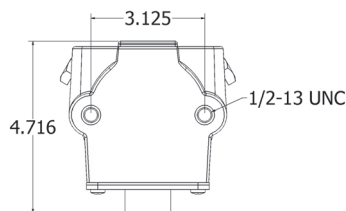
FOR PIPE SIZES OF 2
TO 3 INCHES



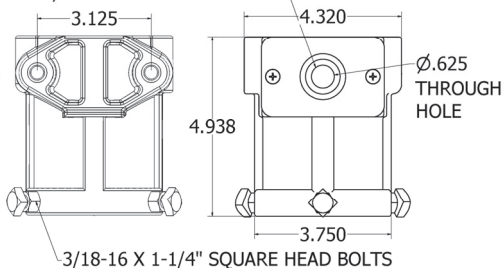
SB-5 POLE TOP SLIP-FITTER



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



EASY WIRE PASS THROUGH -
3/4 -14 MPSP PIPE THREAD



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NORTH STAR
LIGHTING

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Star Beam LED

Product Specifications

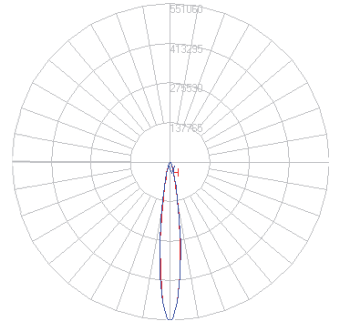
StarBeam LED sport lighter offers an all-star champion luminaire that is compatible with sports friendly lighting controls allowing complete dimming control of light levels. Our Technical team is available for support and integration for the latest lighting control systems.

Product Performance and Ratings

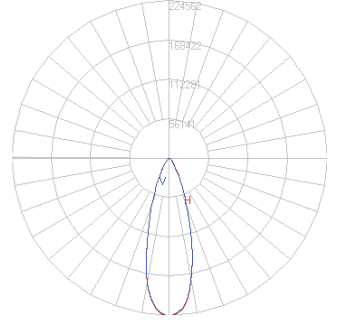
Model No →	SBL-450W	SBL-600W
System Nominal Watts	450W	600W
Delivered Lumen Output (5000K @ Tj 105C)		
15° Beam	47,400	62,994
30° Beam	66,252	88,136
60° Beam	66,952	89,066
90° Beam	65,924	87,699
120° Beam	67,737	90,113
Input Voltage Options	100-277V OR 240-480V	100-277V OR 240-480V
Ambient Temp. Range	-30 to 50 degree C	-30 to 50 degree C
LED Color Temp. Range	3000K / 4000K / 5000K	3000K / 4000K / 5000K
Light Beam Spread @ 50% of max. Cd.	15° / 30° / 60° / 90° / 120°	15° / 30° / 60° / 90° / 120°
Housing/Enclosure IP Rating	IP66	IP66
Physical Dimensions	17.87" Diameter X 10.35" Deep	17.87" Diameter X 10.35" Deep
Equivalent Projected Area (EPA, SQ. FT)	2.4	2.4
Weight	28.5 lb.	30 lb.
Safety Certification	UL1598/CSA C22.2 #250; Outdoor Wet Location	UL1598/CSA C22.2 #250; Outdoor Wet Location

* For 3000k, reduce lumens by 4% and for 4000K, reduce lumens by 2%

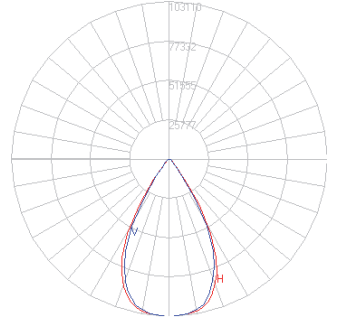
D15 – 15° Beam Distribution



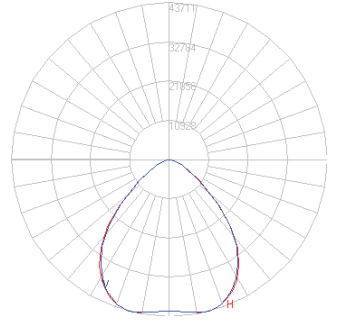
D30 – 30° Beam Distribution



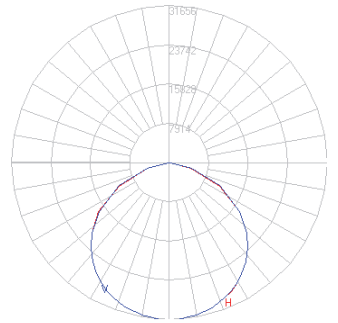
D60 – 60° Beam Distribution



D90 – 90° Beam Distribution



D120 – 120° Beam Distribution



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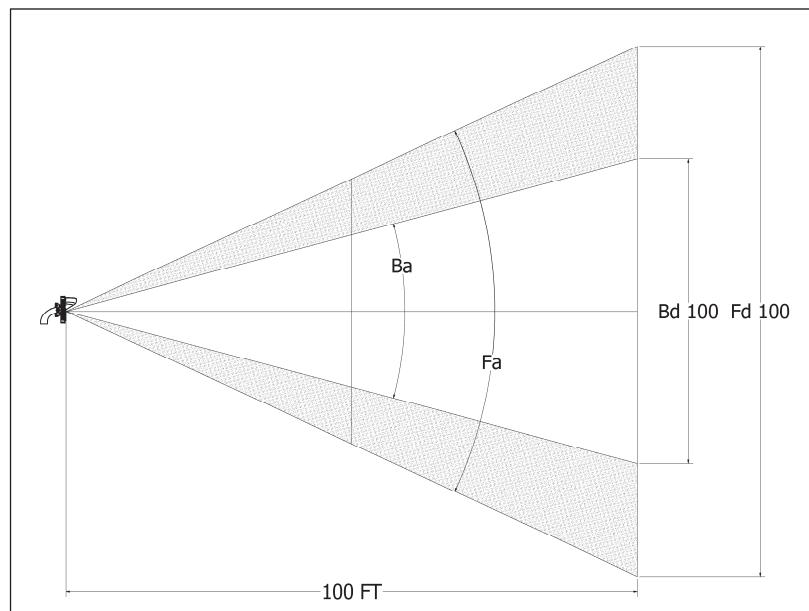
Star Beam LED

Photometric Application Data

SBL 450W					
Performance Values	Optic D15	Optic D30	Optic D60	Optic D90	Optic D120
NEMA Classification	3HX3V	4HX4V	5HX5V	6HX6V	7HX7V
Maximum Center Candela Cd-max	414,644	168,804	77,508	32,858	23,795
Maximum Center Fc @100 ft - Fc100	41.46	16.88	7.75	3.29	2.38
Beam Angle @ 50% of Max. Fc - Ba degrees	14.5	31.7	58.5	88	114.6
Field Angle @ 10% of Max Fc - Fa degrees	31	62	80.5	128.2	156.5
Beam Diameter in feet @100 ft - Bd100	25.44	56.78	112.00	193.12	311.49
Field Diameter in feet @100 ft - Fd100	55.46	120.16	169.30	411.81	961.13

SBL 600W					
Performance Values	Optic D15	Optic D30	Optic D60	Optic D90	Optic D120
NEMA Classification	3HX3V	4HX4V	5HX5V	6HX6V	7HX7V
Maximum Center Candela Cd-max	551,060	224,562	103,110	43,711	31,655
Maximum Center Fc @100 ft - Fc100	55.11	22.46	10.31	4.37	3.17
Beam Angle @ 50% of Max. Fc - Ba degrees	14.5	31.7	58.5	88	114.6
Field Angle @ 10% of Max Fc - Fa degrees	31	62	80.5	128.2	156.5
Beam Diameter in feet @100 ft - Bd100	25.44	56.78	112.00	193.12	311.49
Field Diameter in feet @100 ft - Fd100	55.46	120.16	169.30	411.81	961.13

NOTE: SEE PHOTOMETRIC APPLICATION
DATA FOR SPECIFIC BEAM INFORMATION



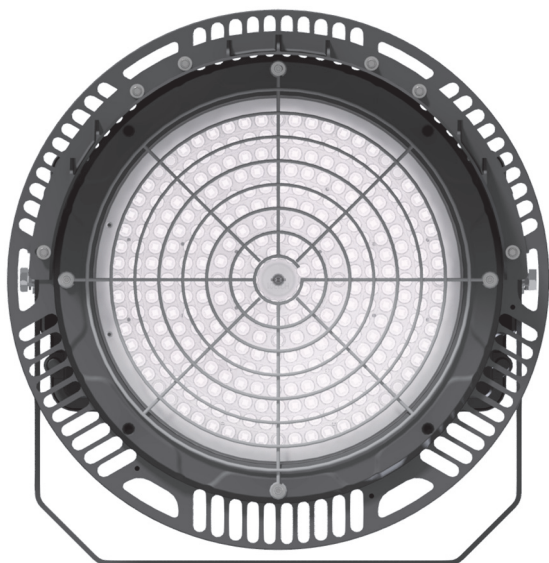
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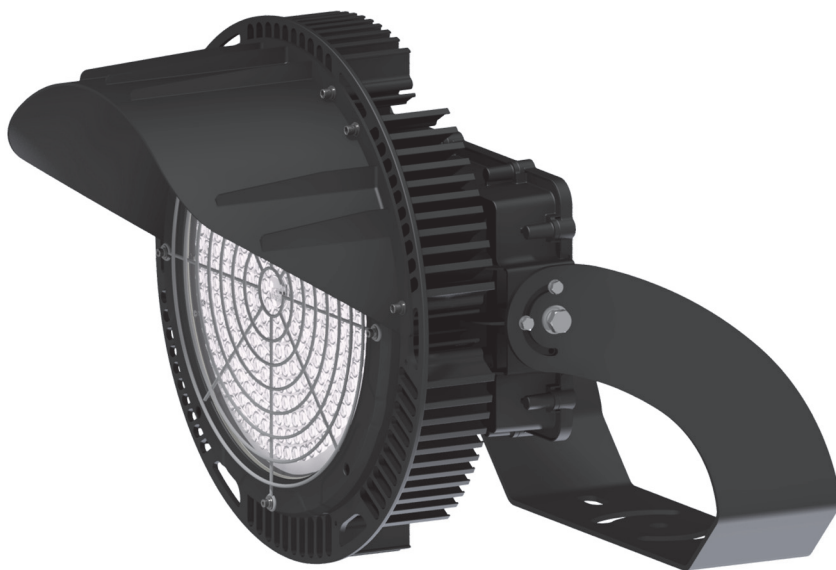
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Accessories



G – Wire Guard



V – Visor (with wire guard)



H – Hood

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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	Mounting Options	Accessories
SBL	450	3K - 3000 K	D15 - 15° Beam	U - 120V-277V	ND - Non-Dimming	Y - Yoke	V - Standard Visor
	600	4K - 4000 K	D30 - 30° Beam	V1 - 347V	DM - 0-10 VDC Dimming Interface Only	SB-2 - Horizontal 180° Aiming Bracket	H - Hood
		5k - 5000 K	D60 - 60° Beam	V2 - 480V		SB-3 - 2" Pipe clamp mount	G - Wire Guard
		XX - Specify CCT or single Color*	D90 - 90° Beam			SB-5 - 2" Tenon Slipfitter	
			D120 - 120° Beam				

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

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