

LED SPORTS AND STADIUM LIGHTING

Efficacy 130LM/W • Replace HID 1000W-2000W



STU series - models: STU 480W/600W/720W/960W/1200W/1440W/1620W STUR 480W/600W/720W/960W/1200W/1440W/1620W

Top Product Features

Highly efficient, heavy duty LED floodlight designed to replace HID lighting in applications requiring high performance.

Reflector Optics:

- Reflector: patented and industry leading UV coated preventing yellowing and degradation over time.
- Glare and Spill Light Control: Five (5) available beam distributions provide the flexibility and performance required for indoor and outdoor sports lighting.

Reliability:

- High purity aluminum Passive Heatsink.
- Citizen Chip-On-Board (CoB) LEDs
- L70: With a 90,000+ hour rated life the LED luminaire is designed for long life.

Accessories:

- Custom visors provide additional cutoff and spill light control.

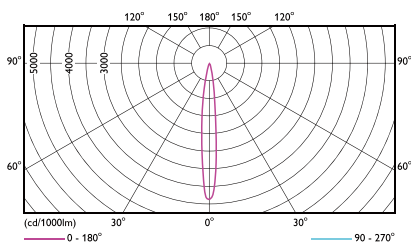
Body:

- Recyclable, High purity aluminum and powder-coated

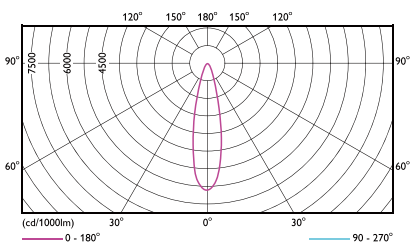


Photometric Output

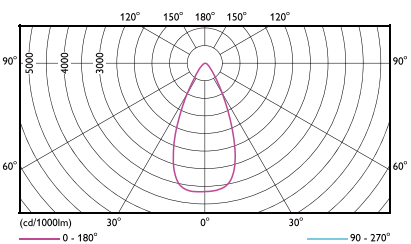
S1(15°) Distribution:



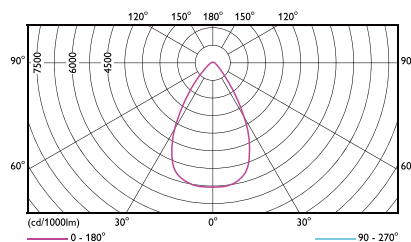
S2(23°) Distribution:



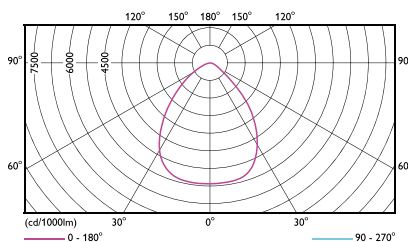
S3(38°) Distribution:



S4(45°) Distribution:



S6(60°) Distribution:



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Technical data

Performance

Lumen Output Range	156000lm
Nominal Power	1200w
Efficacy Range	130 - 140lm/w
Lumen Maintenance [L70 B50]	190.000h
Lumen Maintenance [L80 B10]	119.000h

Optoelectronics

CRI	70 - 80 - 90
TLCI	70 - 90
Colour Temperature	4000K-5000K -5700K
Secondary Optics	Reflector UV Coated Preventing
No. of LEDs	15 Pcs Citizen COB

Luminaire Body

Bracket	Stainless Steel or Q235 Steel
Metal Finish	Powder Coating
Heatsinks	1060 High Purity Aluminium
Bracket	Angled Reversible bracket, M16 or 2 x M10 Fixing points
Approximate Weight	25.6 kg
Dimensions (L-W-H)	526-512-590mm
Impact Resistance	IK08
Protection Level	IP66
Windage Effective Projected Area (EPA)	0.26 m ²

Electronics

Input Voltage (Low Voltage)	90-305 VAC 50-60Hz
Input Voltage (High Voltage)	249-528 VAC 50-60Hz
Active Power F.C.	0.95
Surge Protection	10KV, IEC62412
Insulation class	IEC Class I
Short Circuit Protection	Auto-recovery
Over Heat Protection	Drops Output Current
Dimming Range	DIM TO OFF, 10%-100%
Electrical Certifications	SAA, CB, ETL, DLC
Environmental Certifications	IP66

Operation Conditions

Working temperature	-40°C - +50°C
Humidity Range	0% - 94%
Usage	INDOOR, OUTDOOR
Mounting Options (1.5G RATED)	LOCAL YOKE

Packaging

Luminaire Dimensions	L526mm x W512mm x H590mm
Package Dimensions	L560mm x W560mm x H640mm

Warranty

5 years

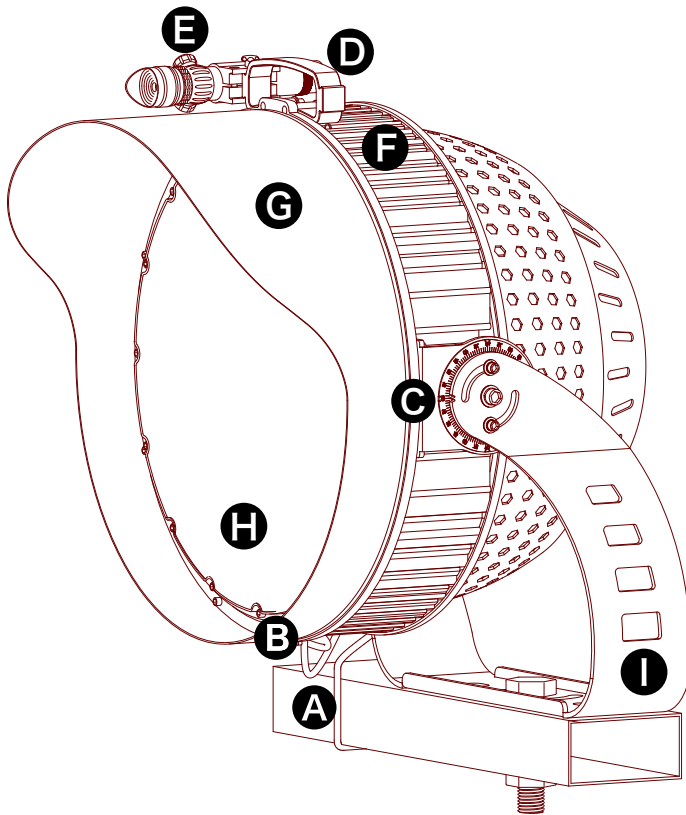
Warranty

Ten (10) Years Warranty - LEDs, Fixture, and Driver shall conform to its published specifications under normal usage and operating conditions including "no light loss" of more than 10% at the end of the period. LEDs will produce at least 90% of their initial light output with no color shift after 90,000 hours of operation.

Listings And Tests

UL listed driver, CE, suitable for wet locations. RoHS compliant. IP68 Rated optical assembly. LM-79 and LM-80 info available. Conforms to FCC Part 15.19 Subpart B Class A. Made in USA - ARRA Compliant. ANSI 136.31-2001 3G.

HIGH LUMINANCE . LOW GLARE



- A** Stainless rope: install a secondary Stainless wire rope between the luminaires and the supporting structure.
- B** Safety rope, It is the 2nd guarantee of the luminaires in case of failing.
- C** Stainless sheet aiming angle index, the dial is marked by number, it is easy to set its install angle, even at the 2nd installation, it is still can be installed same angle as before.
- D** Hand grip, humanized design convenient for workers to carry when moving to install the fixture.
- E** Aiming Device: To direct the orientation of the luminaire.
- F** High purity aluminum Passive Heatsink, Vertical extruded design for max heat dissipation and minimal dust collection.
- G** Spcc or aluminum metal sheet light shiele finished with powder-coating, lihgt weight&anti-corrosion.
- H** High transmittance tempered glass IK08 grade, maximum ultraviolet protection. Secures LED engine from dust and liquids.
- I** Q235 or Stailless steel metal, strong mounting bracket, pass 3G-D 100,000 cycle test.

Application



stadium
& arenas



Recreational
sports



Multi-sports
halls



Rugby
sports



Swimming
pools



Handball
sports



Basketball
sports

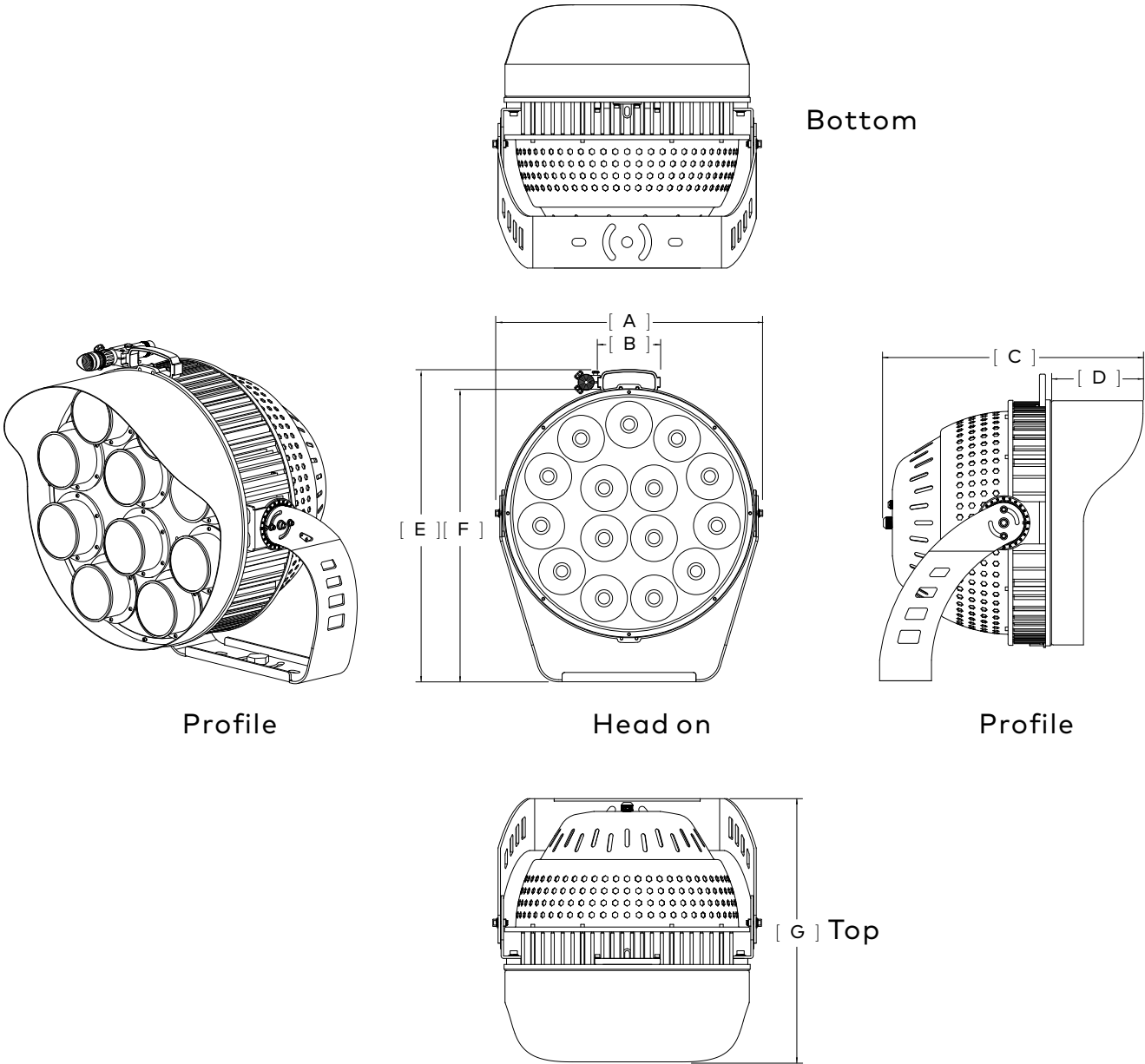


Outdoor
Courts Tennis

STU series - models:

STU 480W/600W/720W/960W/1200W/1440W/1620W
STUR 480W/600W/720W/960W/1200W/1440W/1620W

Dimensions

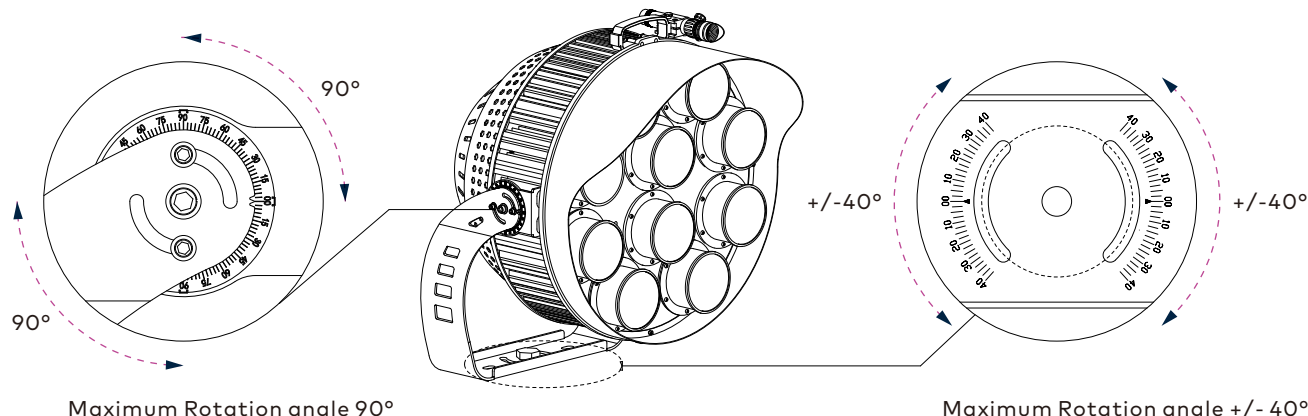


	A	B	C	D	E	F	G
	51.2cm/20.2"	12.0cm/4.7"	47.6cm/18.7"	18.0cm/7.1"	59.0cm/23.2"	54.8cm/21.6"	50.6cm/19.9"
1200W	A	B	C	D	E	F	G
	51.2cm/20.2"	12.0cm/4.7"	49.6cm/19.5"	18.0cm/7.1"	59.0cm/23.2"	54.8cm/21.6"	52.6cm/20.7"

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Rotation Options

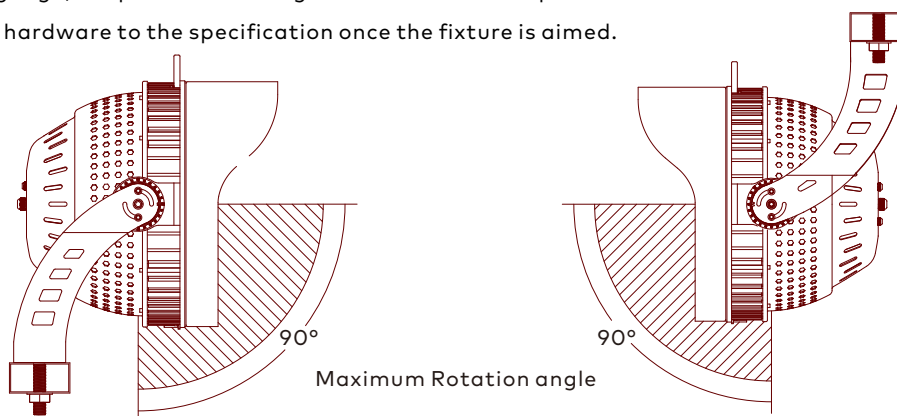
To pre-aim the fixture orientation, rotate the bracket about the mounting bolt until the reference line that was marked on the mounting structure is aligned with the correct angle on the orient label in the bottom of the bracket.



Hardware Description	Use / Location	Tool	Torque	Quantity
M16 Mounting Bolt Assembly	Mounting Fixture To Mounting Structure	24mm Socket	190Nm	1PCS
M10 Locking Bolt Assembly	Orient Lock	16mm Socket	40Nm	2PCS

If laser aiming, tighten the mounting hardware so that fixture is secure but do not fully torque hardware until final aiming is complete. Prevent access to area under fixture until the final torquing is complete.

If using the orient gauge, torque the mounting hardware at this step to the values in the table below. If you are laser aiming, torque the hardware to the specification once the fixture is aimed.



Ordering codes

Product	Series	Power
LS	STU	1000W
LS	STU	1200W

Example: LS-STU1000W

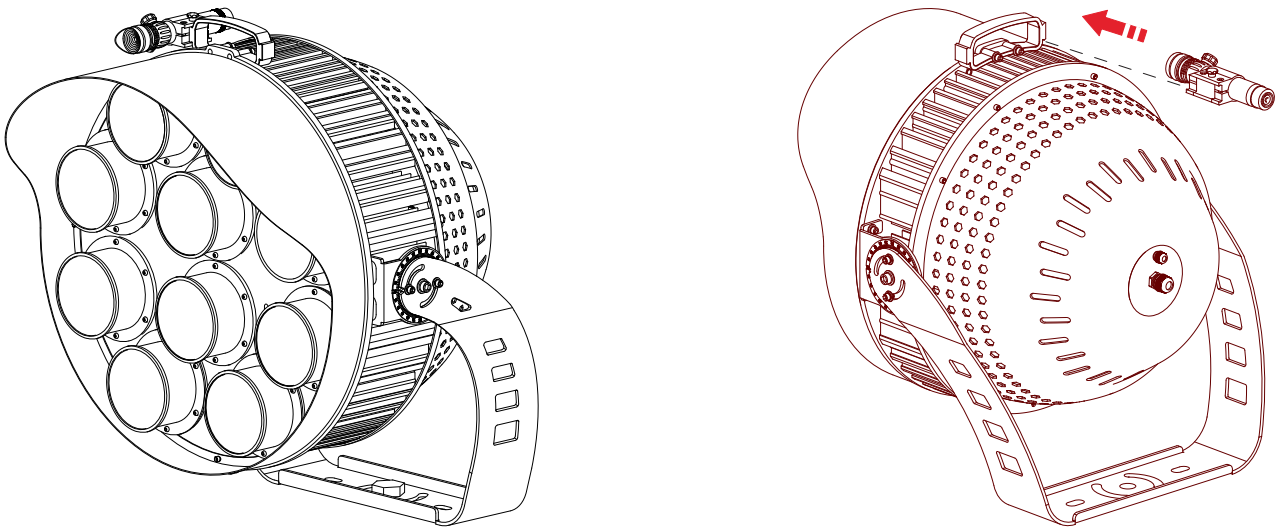
Laser Aiming

- ⚠ Prevent access to area under fixture until laser aiming is completed.
- ⚠ Do NOT over-loosen or remove set screw.

If fixture pre-aiming using the tilt and orient gages is satisfactory and laser aiming is not required, you can skip this step. Refer to photometrics or project installation drawings for aiming point coordinates.

Slightly loosen the fixture aiming screws just enough to allow the fixture to rotate and tilt.

Insert the aiming mount onto the fixture aiming pin until it is fully seated tight against the fixture.



Hardware Description	Use / Location	Tool	Torque	Quantity
M16 Mounting Bolt Assembly	Mounting Fixture To Mounting Structure	24mm Socket	190Nm	1PCS
M10 Locking Bolt Assembly	Orient Lock	16mm Socket	40Nm	2PCS
M6 Screw	Tilt Lock	5mm Allen Key	10Nm	4PCS
M4 Hand Screw	Laser Sight Lock	Manual lock	2.8Nm	1PCS

Turn on the laser and aim the fixture by targeting the laser dot at the aiming point.

Note: Turn off laser while not in use to conserve battery. Have spare battery charged to facilitate the aiming process.

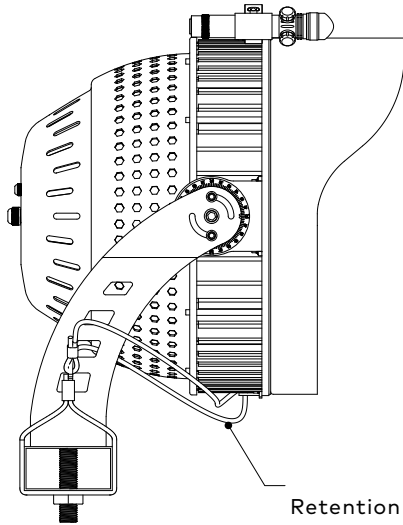
Tighten All Hardware

After the fixture is aimed. Tighten all mounting and aiming hardware on the light head and bracket to the torques specified in the table below.

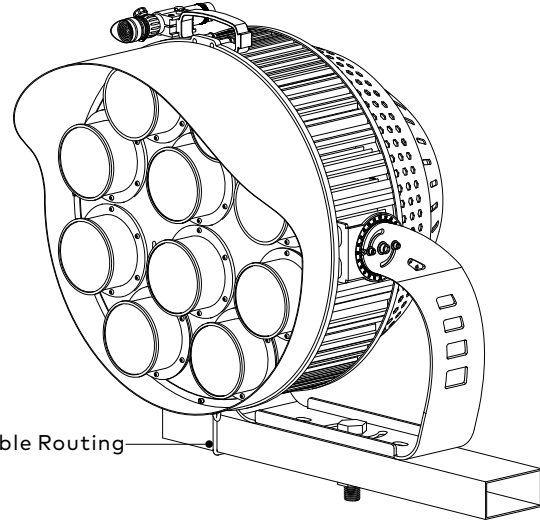
If laser aiming, briefly turn the laser back on to verify that the luminaire aiming did not shift during tightening. Remove the aiming mount from the fixture.

Install Secondary Retention

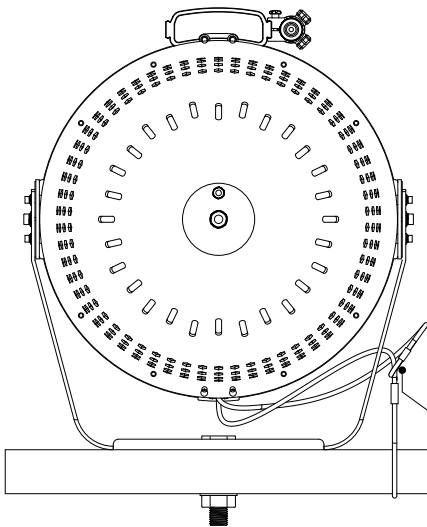
If required, install a secondary retention cable between the fixture and the supporting structure that is designed to support the weight of the fixture, such as the crossarm, catwalk railing, or beam. Route the cable through the cable port located on the bottom edge of the fixture, through the mounting bracket arm, and around the support structure.



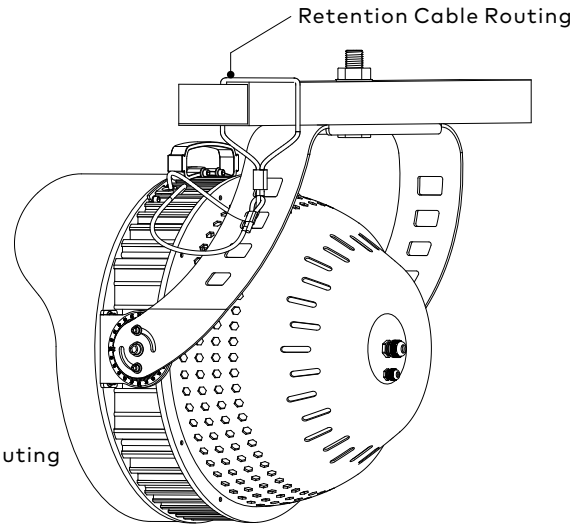
Retention Cable Routing



Retention Cable Routing



Retention Cable Routing



Retention Cable Routing

NOTE: Never secure the secondary retention cable to electrical conduits, power or HVAC equipment, other light fixtures, frangible material, or any other object not designed to support heavy loads.

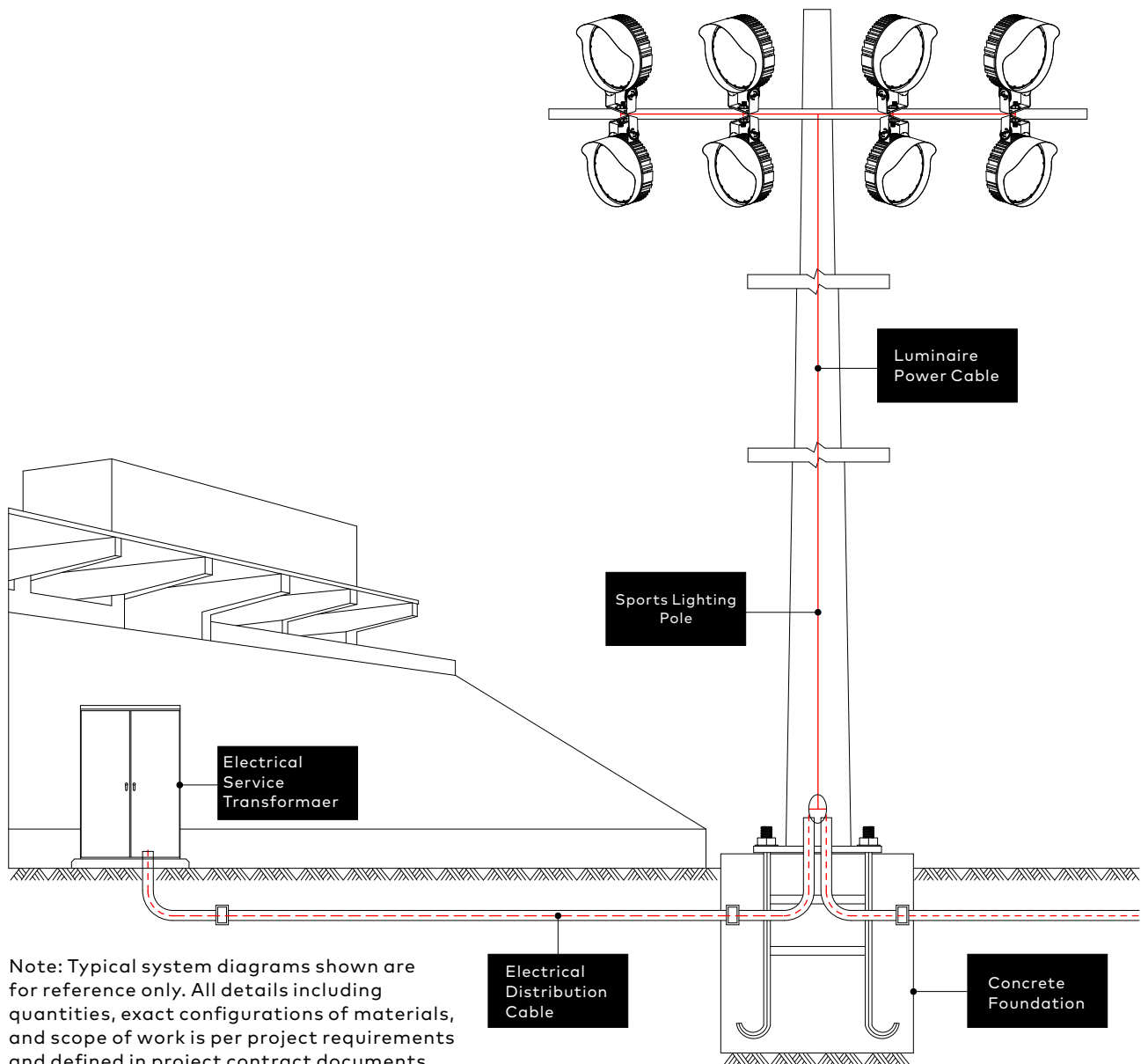
Secure secondary retention cable to a structural component at a point above and directly behind the fixture if possible. Leave enough slack to allow fixture aiming if not completed, then pull extra slack through the locking clip after its aimed.

⚠ Failure to properly install fixture and secondary retention cable may result in damage, injury or death.

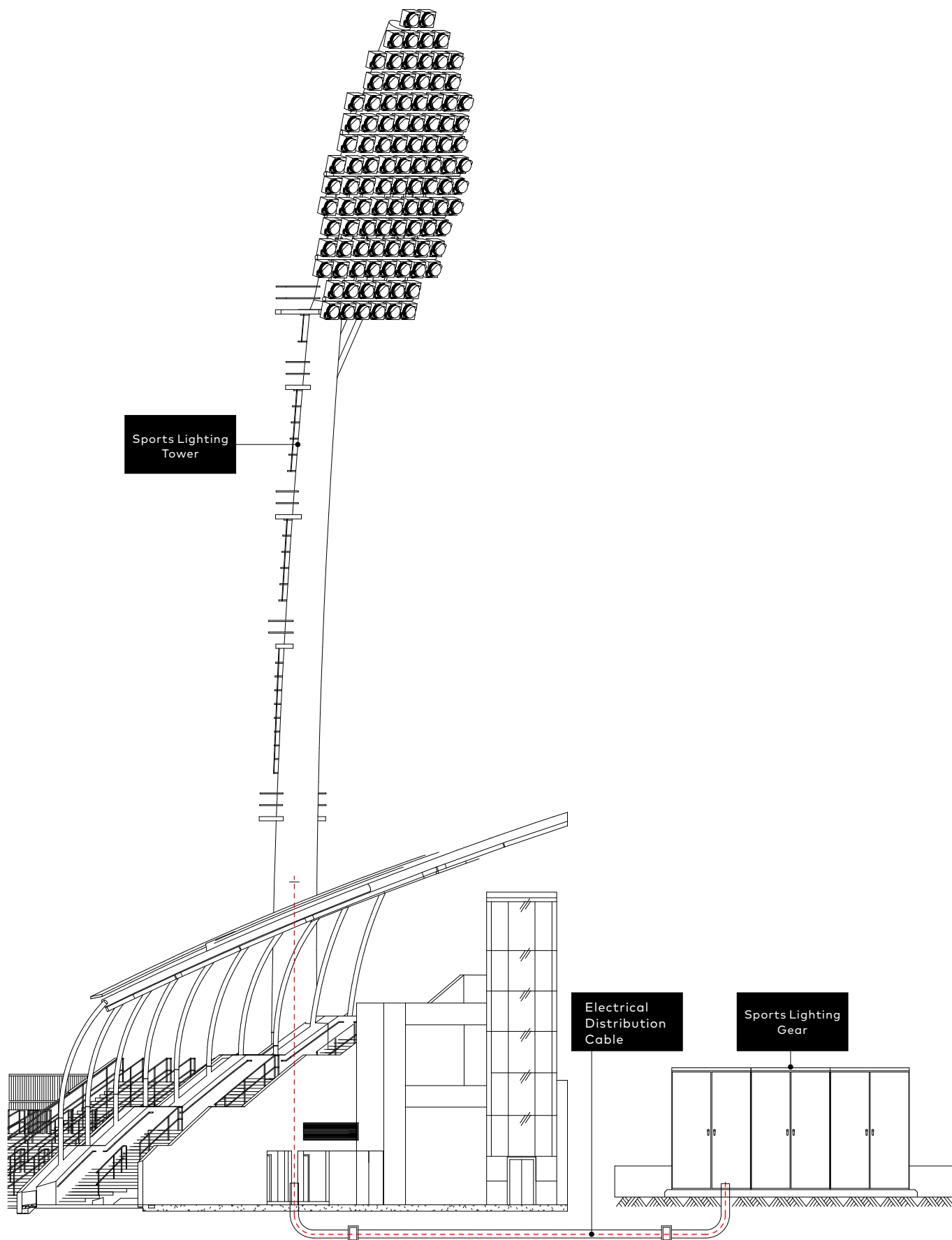
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We Have Your Solution

The Sports Lighting System Retrofit System converts your existing remote or integral system to an integral LED sports lighting system with industry leading reliability and performance. In a existing remote power configuration the ballasts in the power box are typically located at the bottom of the pole. In an Sports Lighting System Retrofit System the Ballasts in the power box are bypassed in order to bring AC power to the top of the pole. The diagram below illustrates a successful Sports Lighting System Retrofit System.



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Controls Overview

Sports Lighting System can provide zone area management, scheduling and instantly responsive dynamics.

Static Scenes: On/Off; Dim 10-100%; Individual luminaire control; Unlimited programmable static scenes.

Dynamic Scenes: Paparazzi (standard & fast); Sparkle (standard & fast); Random.

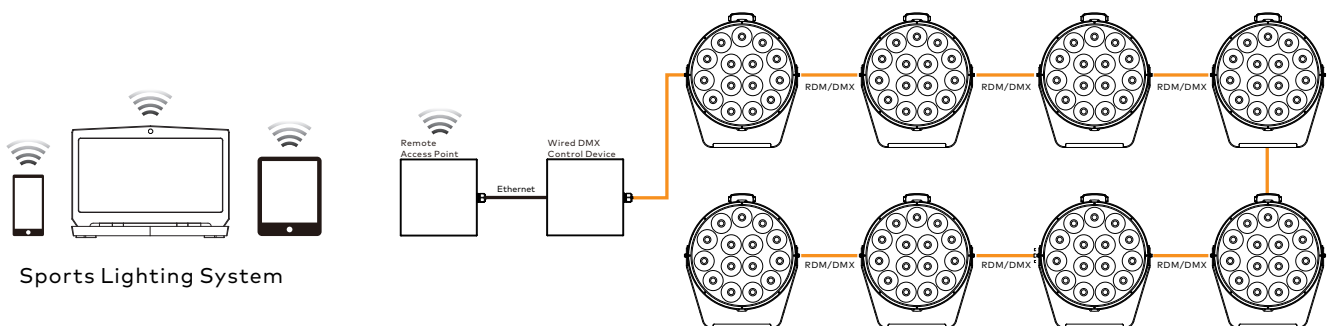


Take Control Of Your Sports Lighting

Example System Topology (Wired DMX Controls)

Example system topology showing the Sports Lighting System in a commonly used wired DMX Control Installation.

Refer to the specifications and limitations of your wired DMX control device before installing this configuration.

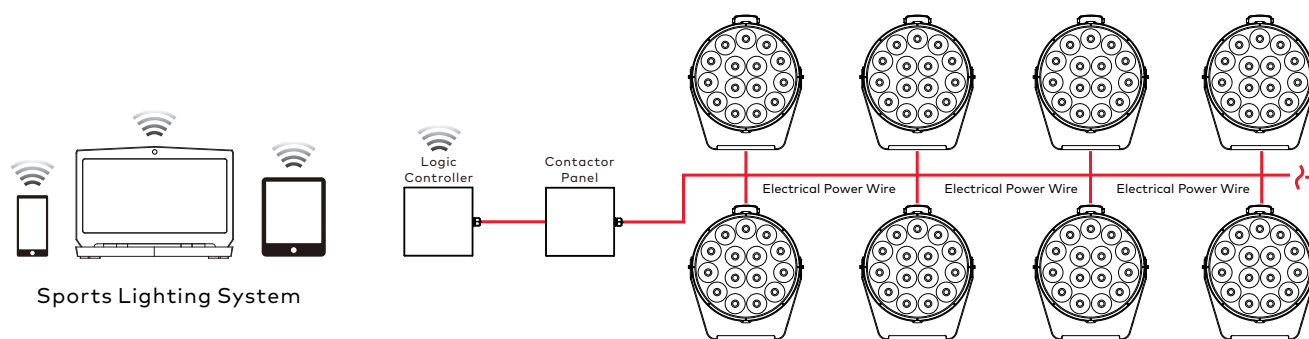


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Example System Topology (Contactor Controls)

Example system topology showing the Sports Lighting System in a Wired Contactor Controls Installation.

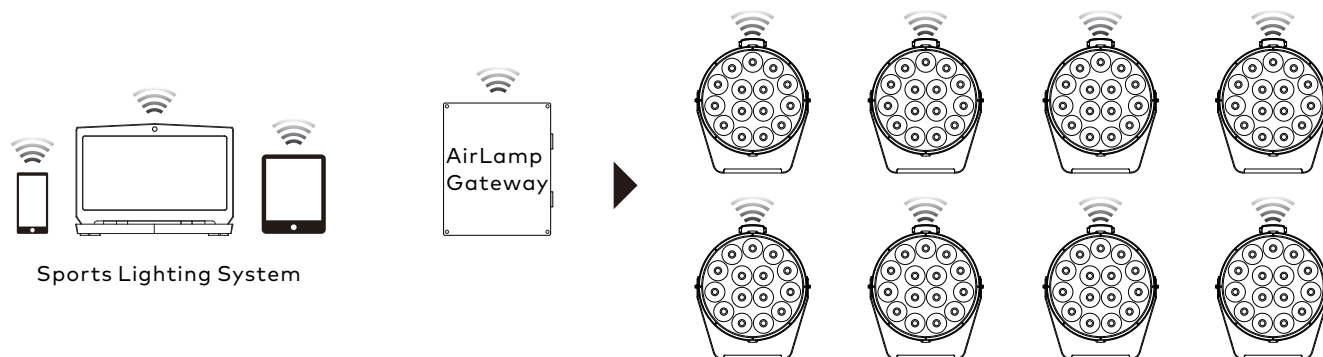
Note: Laptop and mobile device not included. A cellular network connection requires a cellular carrier network plan.



Example System Topology (Wireless AirLamp Controls)

Example system topology showing the Sports Lighting System in a Wireless AirLamp Control Installation.

Note: Laptop and mobile device not included. A cellular network connection requires a cellular carrier network plan.



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