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SERIES FH
LED Sports & High Mast Light

WHAT ARE THE ADVANTAGES OF OUR PRODUCT

Series FH, the new generation in LED sports & area lighting, create an unbelievable combination of world-class performance, energy saving, cutting-edge optical & thermal management technology and ongoing low maintenance cost in one sleek package solution

01 All-In-One Design to Perform



Series FH, the new generation in LED sports & area lighting, create an unbelievable combination of world-class performance, energy saving, cutting-edge optical & thermal management technology and ongoing low maintenance cost in one sleek package solution

03 MODULAR DESIGN CONCEPT



Series FH, adopt modular design concept based on 250-300W per module, and maximum to 1500W with five modules. Racked angle make the light fixture can be adjusted to flexibly control the light, equipped with laser aimer for precise aiming at the field.

Thanks to the modular design, Series FH applies to all kinds of stadiums, sports venues, airport, ports etc.

02 FLICKER-FREE/SLOW MOTION REPLAY



Slow Motion Replay can record exciting moments of the contestants. As the advantage of hi-definition camera technology, conventional 4K camera can reach 2000fps, Series FH adopt MW/Inventronic power supply, completely achieve the effect of flicker-free and meet the need of Slow Motion Replay

04 LOW WIND RESISTANCE, HIGH PROTECTION



Thanks to the modular design, the combination between each module is not completely closed, which can reduce the overall EPA, Series FH, is up to IP66 and IK10, meanwhile it is equipped with wire guard to realize ball-proof, safety rope for double protection

Series FH integrate built in 10KV surge protection device, alternative for 20KV

05 CUTTING-EDGE THERMAL MANAGEMENT SYSTEM



The lifespan and reliability of the light fixture are largely depend on the thermal management system, which include three passive cooling method, conduction, radiation and convection. Fin-design increases the heat dissipation & conduction areas, it is much more conductive to heat dissipation, performance and lifespan

Series FH has strict control in LED temperature rise of nodes, to protect its excellent reliability

07 GLARE-FREE



Glare control is an important criterion in contemporary stadium lighting design. Excellent glare control not only allow contestants to play at a high level, but also facilitate the shooting of camera and enhance the visual experience of on-site audience.

Series FH, equipped with conventional visor and unique-designed optical lens achieve a glare-free feeling

06 SPILL LIGHT-FREE



There are many suburban sports ground surrounded mainly by residential homes which spill lighting seriously affect the daily life of the resident.

Series FH have designed asymmetrical optical lens, which the light projection will focus on the sports ground without spill light to residential homes or surrounding areas.

08 HIGH CORROSION & RUST RESISTANT



Salt mist is the key cause to rust and corrosion of the light fixture, which will decrease the structure strength, reliability and lifespan or even lead to security incident, especially for coastal areas, such as port, wharf etc.

Series FH has multi-ways for high anti-corrosion treatment to meet 1000/2000/3000H neutral salt spray by AkzoNobel powder coating, electrophoresis, triple powder coating etc.

MODERN STADIUM

Lighting infrastructure is a strategic resource in modern stadium. LED lighting not just simply means energy saving, environmental protection, reducing installation job, and reducing subsequent maintenance cost. More importantly, it offers new opportunities for the stadium. Different lighting demand can be realized through intelligent control, making the stadium being a multi-functional venue which is capable of holding large scale events, such as concert.



IP66



IK08/IK10



Low Failure Rate



Long Lifespan



Fast Heat-dissipation



Fan enthusiasm is the core part of a contest. Fan's emotion and atmosphere can be stimulated by pre-game and post-game entertainment activities, which will increase time that fans stay in the stadium and largely maximize the



Contestants need comfortable light free from glare to reduce reaction time and to avoid mistakes, so that they will surpass at an exceeding level. In addition, for sports such as football, both the vertical and horizontal directions must ensure perfect illumination.



LEDs with TLCI>90 is adopted, which can meet the HD camera's requirement to broadcast. DC dimming program is used to achieve flicker-free effect and slow motion replay demand.



Lighting inside the stadium is the central part of modern stadium lighting. MKLIGHTS series can effectively reduce glare through multiple anti-glare design, allowing player to have upgrading

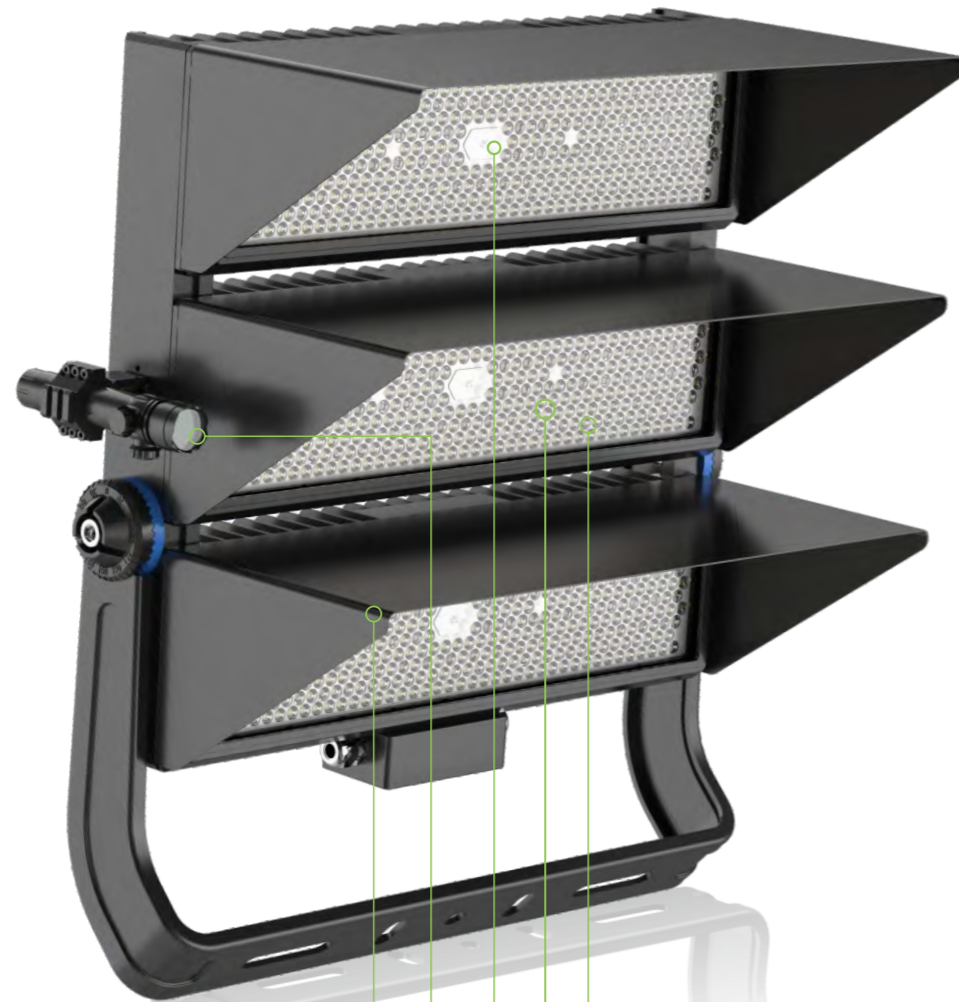


Besides lighting inside the stadium, lighting outside the stadium is required to improve as well. MKLIGHTS has corresponding product series for selections



Large stadium can accommodate tens of thousands of spectators. MKLIGHTS is available for floodlight, sports light, tunnel light, high mast products.

PRODUCT BREAKDOWN CHART



Visor

Effectively control the spill light, upward light and avoid the lighting pollution.

Aiming Device

Allows for precise aiming and site installation.

Polycarbonate Lens

Japan brand TEIJIN PC with multiple optical lighting design, anti-UV and high mechanical strength.

High brightness LEDs

High luminous efficacy up to 180lm/W, high CRI, Ra>70, >80, >95(TLCI>95, R9>0).

Tempered Glass

4mm high strength tempered glass, further reduces the UV and anti-rust, typically designed for coastal areas.



RoHS

CB



Bracket & Arms

Integrated bracket with hem design ensure the mechanical strength, galvanized treatment for anti-rust.

Driver Cover

Die-casting aluminum driver cover guarantee the corrosion resistance, easy for maintenance and driver protection.

Top Brand Power Supply

Equipped with top brand LED driver: MW, Inventronics, Sosen, ensure the performance and reliability.

Terminal Box

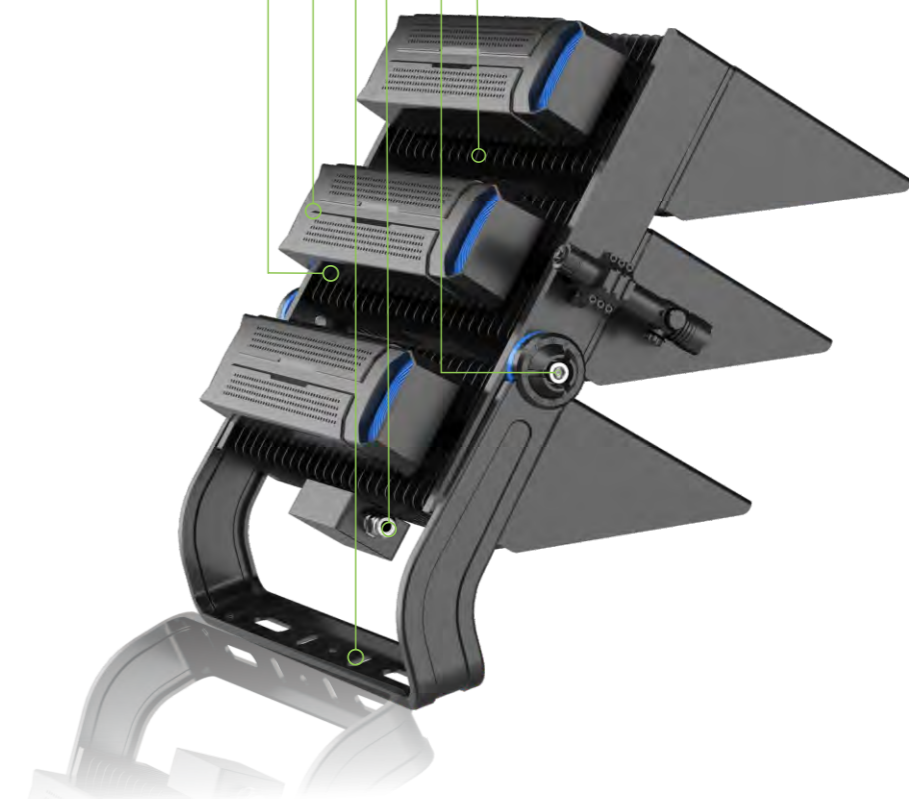
Die-casting aluminum material guarantee the corrosion resistance, waterproof treatment, easy for maintenance and wire joint protection.

Racked Angle

10° steps, allows for 270° installation adjustment.

ADC12 Aluminum Die-casting Fixture Housing

Corrosion resistant treatment, anti-rust, excellent thermal management, long lifespan.



Main Accessories

- 304 Safety Chain

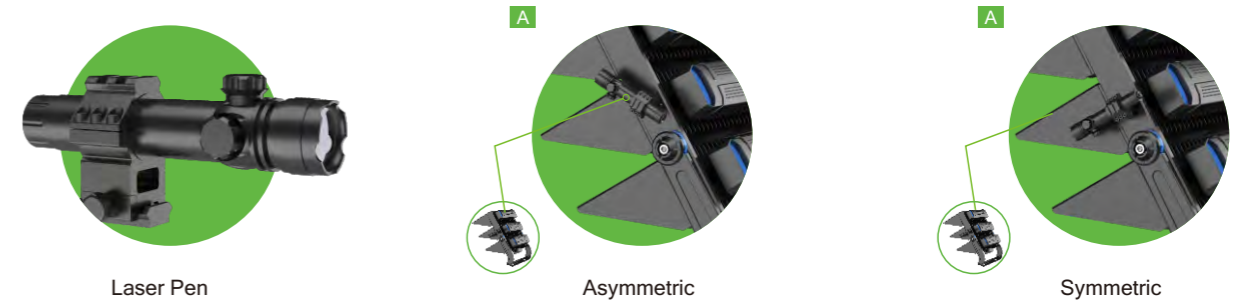


- 10KV/20KV SPD

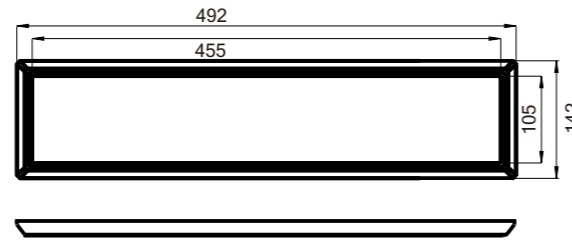
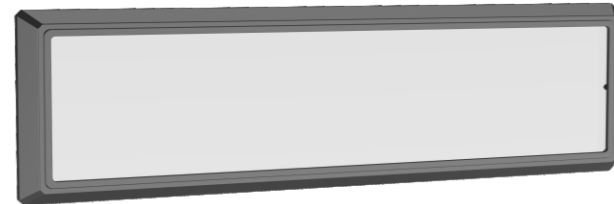


- Aiming Device

Precise aiming device, Suitable for all Modular Floodlight (Symmetric & Asymmetric).

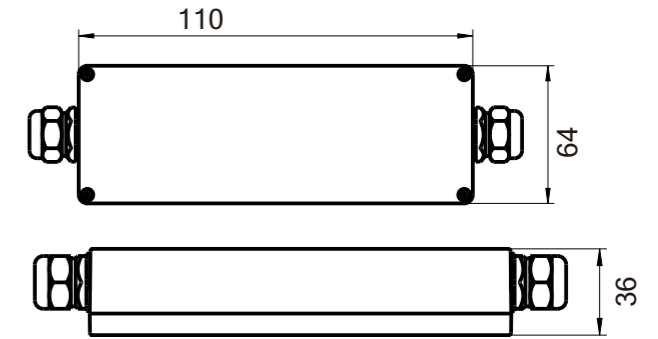
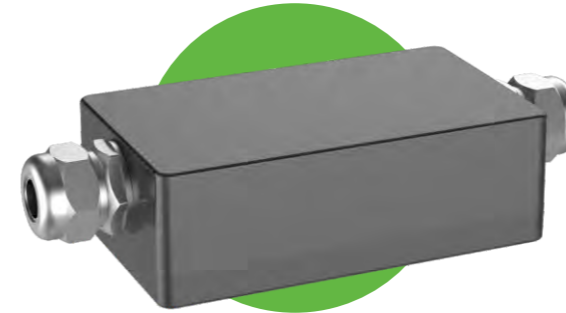


- Glass Cover & Frame

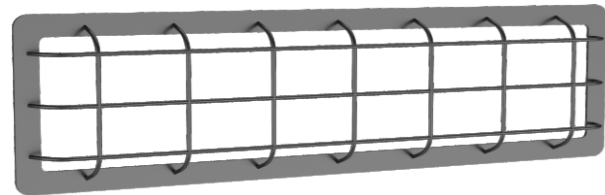


- Junction Box

Die-cast aluminum The junction box can be customized with up to 16 cable glands, Max cable gland M30.



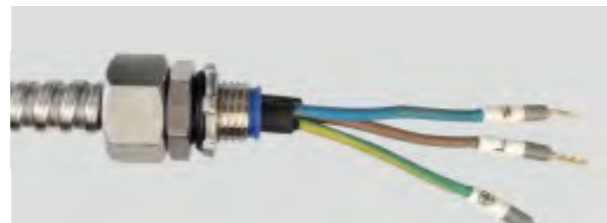
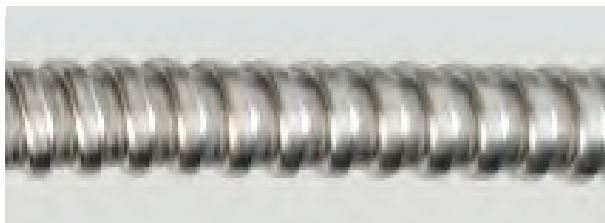
- Wire Guard



- Visor



- 304 Conduit

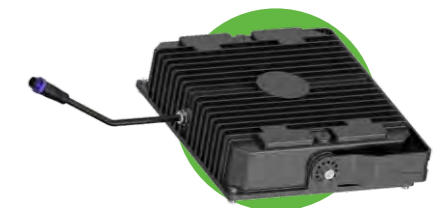


- DMX/DALI to 0-10V Dimming Module

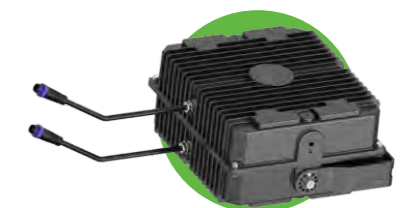
Material: Die-cast aluminum Sealed
Albox to protect driver: Enhanced Corrosion-resistant.



- Driver Box



1-2 Module



3-5 Module

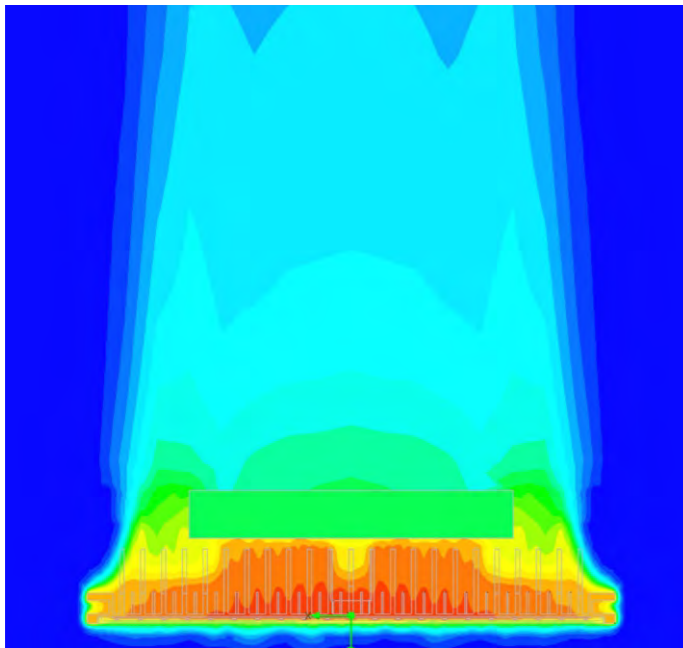
- Neutral Slat Spray 1000H | 2000H | 3000H



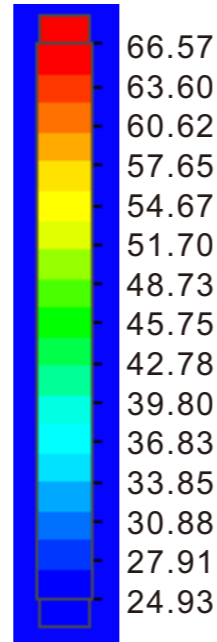
Main Accessories

EXCELLENT HEAT DISSIPATION AND LIFE-SPAN ASSURED

The lifespan and reliability of LED fixtures largely depend on thermal management system which includes three passive cooling methods, conduction, radiation, and convection. Die-casting module design increases heat dissipation areas and conduction areas. It is much more conducive to heat dissipation, performance, and lifespan.



MK-FH-250



Temperature:°C

Conduction

Thermal conduction refers to a type of heat dissipation method in which the heat of the body is directly transferred to the lower temperature object in contact with it.

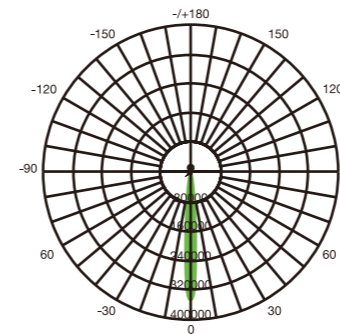
Radiation

Radiation is a heat transfer method in which the heat source is radiated in a straightline in all directions, and at the sametime absorbs the energy back reflected by the surrounding objects. The radiation ability of an object(ie, the energy radiated outward from a unit surface per unit time) increases rapidly with increasing temperature. SERIES FH achieves better heat dissipation capacity by continuously optimizing and increasing the heat dissipation areas. LED heat is transferred to the heat sink through thermally conductive silicone.

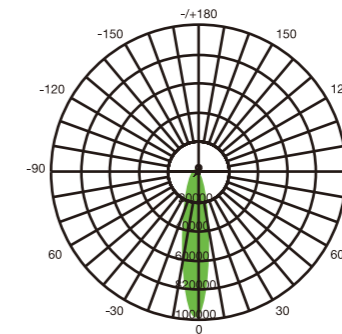
Convection

Thermal convection means that the air temperature rises due to the radiation,and the volume expands and rises. The cold air is then replenished,and the heat dissipation surface exchanges heat with the newly moved cooler air,thus continuously taking away the heat. As for SERIES FH,each module has an extended fin design to achieve convection.

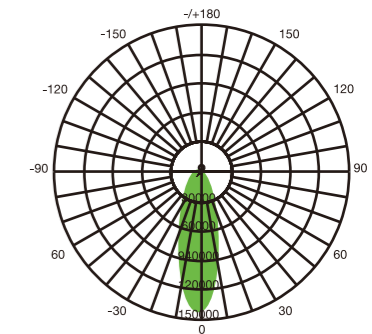
Beam Spread



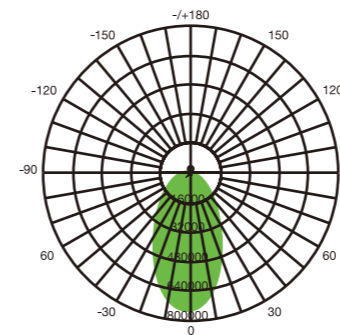
10°



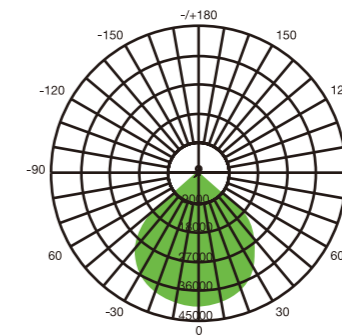
25°



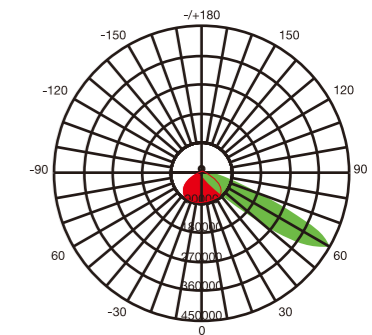
45°



60°



90°

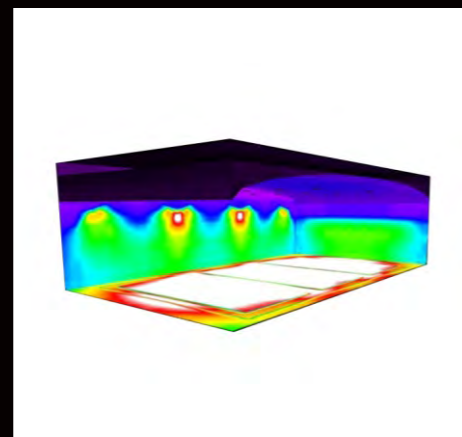
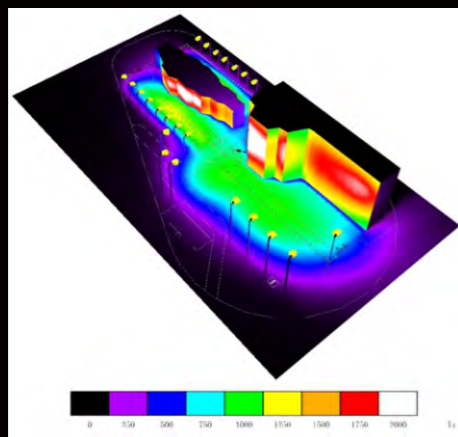
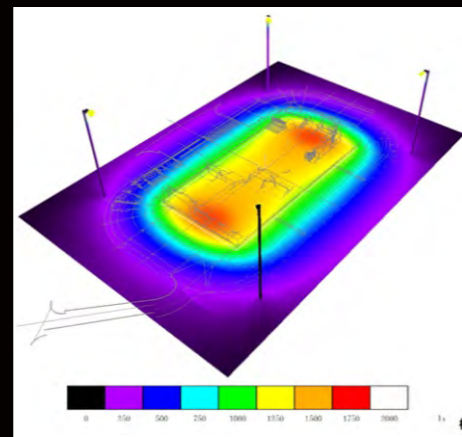
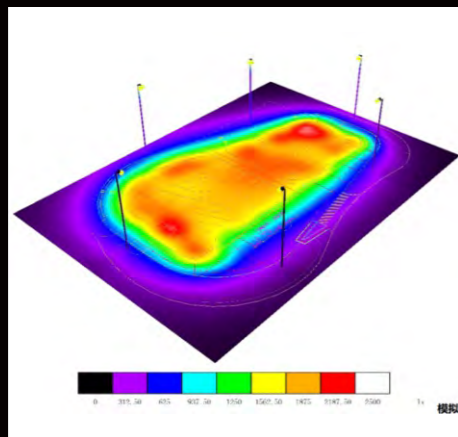
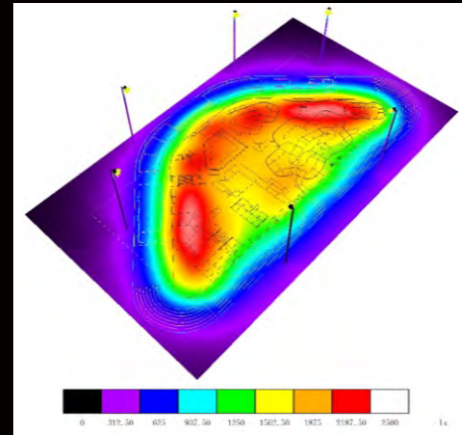
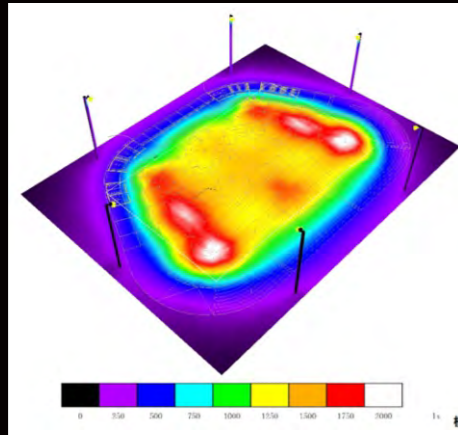


Asymmetrical 65°*25°

Application Field

Soccer Field	Basketball Court	Hockey Field	Tennis Court	Swimming Pool	Athletic Field
Baseball Field	Badminton Court	Stadium Arena	Exhibition Center	Harbor, Wharf	Airport
Up to 170lm/W	70/80/90	Up to 95+	-35c~+50c	IK08/IK10	3000K/4000K/5000K/5700K/6500K
IP66	10/20KV Surge Protection	Flicker Free			

Simulation Renderings



SERIES FH LED Sports & High Mast Flood Light

