



**IINS** HIGH PERFORMANCE  
LED STADIUM LIGHT/SPORTS LIGHT



**100+** Patent Certificates  
**\$1,000,000+** Annual Energy Saving  
**10,000+** Projects Successfully Installed

OVER YEARS   
**10 EXPERIENCE**  
[www.aokledlight.com](http://www.aokledlight.com)





## > Features of INS Series

- PC lens arrangement adopts matrix full light cutting design. By adding a concave light retaining wall, excess light can be removed and the effect of receiving & blocking can be achieved. The design scheme can meet users' requirements for light seeing range to a greater extent.
- The overall streamline of the fixture body is beautiful, generous and decent. The back adopts fin type heat dissipation structure, with better heat dissipation effect. Edge sinking design and convection vents, optimize air convection quality, strengthen heat dissipation, fully ensure the life of the fixture.
- Multiple methods of installation and power supply placement to meet different requirements. External or internal power supply.
- Induction mounting hole is reserved. Offer customers more functional options and more convenient for upgrading in the future.
- IP66 protection grade, waterproof structure design + high resistance wire silicone waterproof ring design, double protection, safer. Better protection of the lamp IP performance.
- Super bracket design, bracket strength can support more than 10 times the weight of the fixture body, the safety factor is higher than counterparts.

<b>UP TO</b> <b>165</b> lm/W	<b>L90B10</b> >100000hrs @ 25°C	Working Temperature <b>Environment</b> -40°C~50°C (-40°F~+122°F)	<b>CRI</b> 70/80/90	• 3000K • 4000K • 5000K • 5700K • 6500K
<b>IP66</b> <b>IK10</b>	<b>5G</b> VIBRATION TESTING	100-277V @ 347-480V 50/60HZ	<b>ANTI-GLARE</b> <b>DESIGN</b>	<b>DIM</b>

# Better Performance Starts with Better Lighting

**5** **10** **WARRANTY**  
5 Year Limited Warranty,  
10 Year Preferred Warranty.  
Please consult with our sales for detailed agreement.

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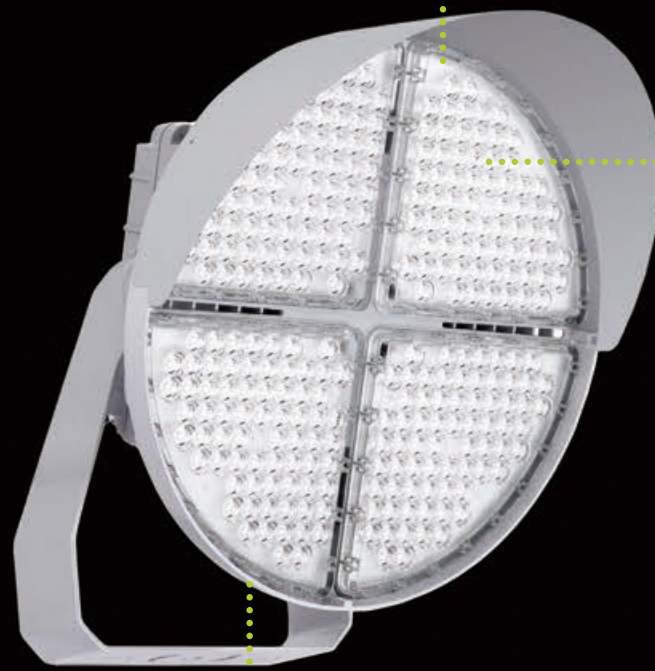


# > Photometric Design

- Glare can cause problems for athletes and nearby residents. Spillover light causes light pollution in the night sky.

- Solving the problem of reducing light pollution is the primary mission of our product design. While providing a brighter lighting system for the site, we were also concerned about how to reduce the disturbance to the surrounding environment.

- Effective control of light can better reflect the energy conservation and environmental protection of LED lighting equipment. The low glare design of the INS series allows for effective control of light and direction, providing greater comfort for athletes on the field, a better spectator experience, and minimizing light pollution.



- Modular design, each optic lens is sink-in design with thread to reduce spill light and glare.



- Visor and laser aiming accessories available and can be field installed.

\*As the products are upgraded, the accessories may differ from those described in the pictures.



- Accurate light distribution for different project needs.



- Integral driver (INS-B) with passive cooling technology. Driver housing is easily accessible and swings open to allow for access to components including driver dimming leads.



- Glare & light pollution
- Light spills out

- Comfortable uniform lighting effect
- No upper light pollution
- Better visual experience

\*Due to the constant improvements in product development, individual parameters might change. Please refer to our sales or R&D team for most up-to-date content as specifications are subject to change without notice.



# > Application Reference



## TYPICAL LAYOUT BASEBALL FIELD WITH 6 POLE DESIGN



Fixture: 1500W HID  
 Fixture Count: 46  
 Average Light Level: 50fc (infield) 30fc (outfield)  
 Total Wattage: 74,150W

Fixture: 720W INS  
 Fixture Count: 44  
 Average Light Level: 50fc (infield) 30fc (outfield)  
 Total Wattage: 31,680W





## > Application Reference





# Parameter Table

Electrical Data						
Model	AOK-315WiNS	AOK-380WiNS	AOK-460WiNS	AOK-580WiNS	AOK-720WiNS	
Power(W)	315W	380W	460W	580W	720W	
Input voltage	100-277VAC, 50/60Hz, 347/480VAC optional					
THD	< 20%					
PF	> 0.90					
Control Option	DALI, 1-10V/PWM/Timer dimming, Nema, Zhaga/Presence detection sensor.					
UGR	<19					
Operating temperature	-40°C to 50°C (-40 °F to 122 °F)					
Driver brand	Meanwell/Inventronics					
Surge Protection	10kV/20kV optional					
Photometric Data						
Efficiency(lm/W) (CRI 70Ra, 5000K) (Std Dev ±3%)	15D	138.4 lm/W	139.1 lm/W	139.7 lm/W	135.3 lm/W	135.3 lm/W
	30D	166.6 lm/W	157.1 lm/W	162.0 lm/W	160.0 lm/W	152.9 lm/W
	60D	167.9 lm/W	156.8 lm/W	167.6 lm/W	163.1 lm/W	156.3 lm/W
	120D	—	—	169.8 lm/W	165.5 lm/W	168.4 lm/W
Luminous flux (lm) (Std Dev ±3%)	15D	43261 lm	52098 lm	63821 lm	78187 lm	96089 lm
	30D	52566 lm	58621 lm	73677 lm	92329 lm	109447 lm
	60D	52929 lm	58622 lm	77315 lm	93205 lm	112023 lm
	120D	—	—	78108 lm	95990 lm	120878 lm
ULOR	= 0%, @ Luminaire inclination 0°					
CCT	3000K, 4000K, 5000K, 5700K, 6500K					
CRI	Ra 70, Ra 80, Ra 90 optional					
Beam angle	15D/30D/60D/120D					
LED Manufacturer	LUMILEDS					
LED model	Lumileds 5050					
Working current of single LED (Standard product)	15D	75mA	90mA	66mA	85mA	105mA
	30D	47mA	56mA	39mA	50mA	63mA
	60D	47mA	56mA	39mA	50mA	63mA
	120D	47mA	56mA	39mA	50mA	63mA
Lens	Polycarbonate, modular design					
Lifespan	L90B10 > 100000hrs, @Ta 25°C					
Mechanical Data						
IP/IK	IP66/IK10, according to standard EN 60529 and EN 62262					
Vibration resistance	3G, conform to standard IEC 68-2-6.					
SCx(EPA, Fixture body)	Front: 0.204386m² (2.2ft²) Side: 0.115943m² (1.248ft²)		Front: 0.285212m² (3.07ft²) Side: 0.132665m² (1.428ft²)			
Housing/Materials	Heavy-duty die-cast aluminum (EN AC-46100)					
Surface treatment	Anti-UV thermosetting polyester/80 micron epoxy primer, Anti-UV thermosetting polyester (for extremely corrosive environments).					
Painting	Black, Silver gray, Custom request					
Cable	Pre-wired with a 30 cm cable (Other lengths on request)					
Mounting	TYPE A/TYPE B/TYPE C/TYPE D					
Others						
Warranty	5 years (Warranty extension up to 10 years on request)					
Certification	UL/cUL/SAA/CE/FCC/ENEC/TUV, For other certificates please request					
Product size	TYPE-A	φ468*343mm			φ550*336mm	
	TYPE-B	φ468*559*407mm			φ550*602*315mm	
Net weight	TYPE-A	10.3kg	10.3kg	16.08kg	16.08kg	16.08kg
	TYPE-B	16.5kg	16.5kg	23.2kg	23.2kg	23.2kg
TYPE-A	540*540*415mm			640*640*435mm		
TYPE-B	550*555*410mm			640*640*435mm		
TYPE-A	13.27kg	13.27kg	19.68kg	19.68kg	19.68kg	19.68kg
TYPE-B	19.5kg	19.5kg	26.8kg	26.8kg	26.8kg	26.8kg
Application field	Suitable for stadium, sports field, port, railway station					

# Construction

- Heavy duty die cast aluminum housing.
- Light engine is thermally isolated from the driver compartment.
- UV Stabilized polyester powder paint finish rated for 1000 hour salt spray.
- Easy maintenance access to electrical components.
- Rugged, weather-tight design and 3G Vibration ratings ensure durability even in harsh environments.

# Optics

- Four available light distributions: 15°, 30°, 60°, 120°.
- High impact UV stabilized polycarbonate outer lens protects LEDs and allows for cleaning and debris removal.

# Electrical

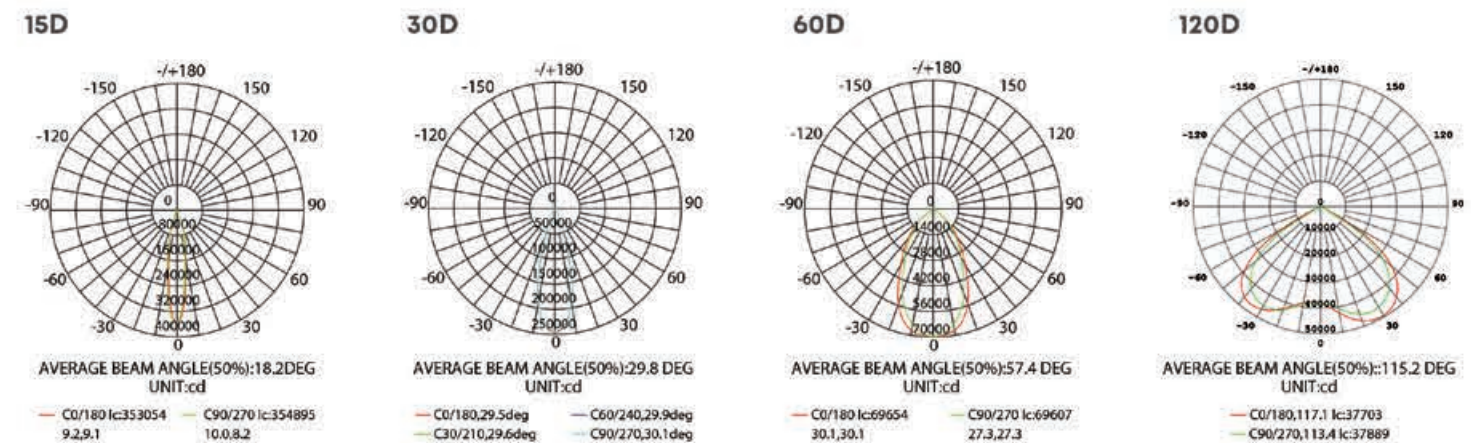
- 0-10 Volt Dimming Driver
- Dimming Drivers available for use with control devices (provided by others). Dimming leads contained in driver housing (integrated model).
- Voltage option: 100-277VAC, 50/60HZ standard; 347V-480V, 50/60Hz optional.
- Ambient Operating Temperature: -40° C to 50° C (-40° F to 122° F); INS-B: -40° C to 40° C (-40° F to 104° F).
- Drivers have 90% power factor and less than 20% THD, SPD optional.

# Ordering Information

AOK	WATTS	VOLTAGE	LED CHIPS	TYPE OF SENSOR	CCT&CRI	DISTRIBUTION	MOUNT	HOUSING
315W iNS	NV=100-277V	L5=Lumileds5050	00=Without Sensor	3070=3000K 70CRI	15D=15°	A=Top Fixed	BK=Black	
380W iNS	HV=347/480V	V2=Lumileds V2	DV=Dimmable	3080=3000K 80CRI	30D=30°	B=With driver box	SG=Silver Grey	
460W iNS			PH=Photocell	4070=4000K 70CRI	60D=60°	C=Split mode		
580W iNS				4080=4000K 80CRI	120D=120°	D=Yoke Mount		
720W iNS				5070=5000K 70CRI				
				5080=5000K 80CRI				
				5770=5700K 70CRI				
				5780=5700K 80CRI				

**Accessories**  
 SPD 10kV, 20kV optional  
 Light visor  
 Laser aiming

# Photometrics



## INS Series Specification Sheet

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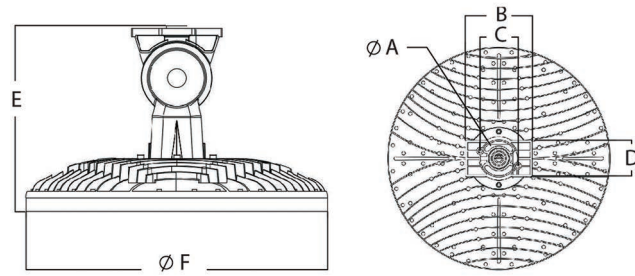
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# Dimensions

## INS-A



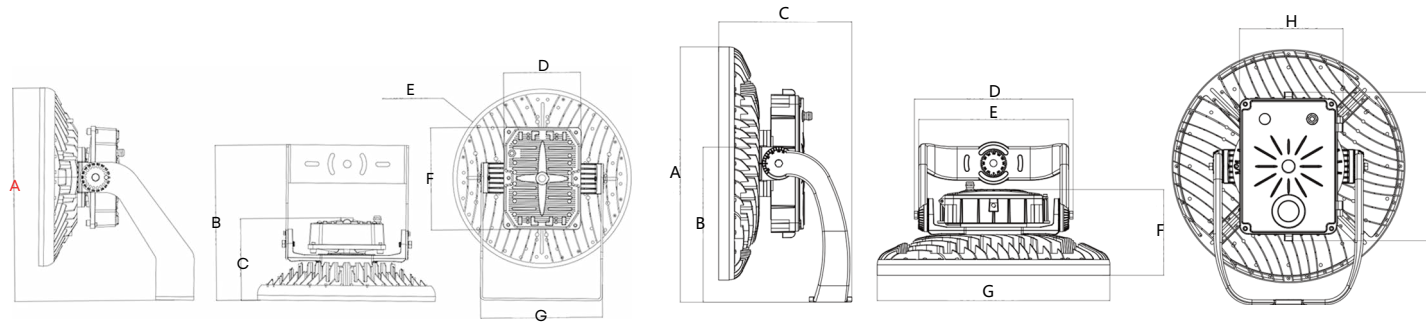
### 315W-380W

A	B	C
7.3cm(2.9")	16.5cm(6.5")	9.3cm(3.6")
D	E	F
9.0cm(3.5")	34.3cm(13.4")	46.8cm(18.3")

### 460W-720W

A	B	C
7.3cm(2.9")	7.3cm(2.9")	9.3cm(3.6")
D	E	F
9.0cm(3.5")	33.6cm(13.2")	55.0cm(21.6")

## INS-B



### 315W-380W

A	B	C	D
55.96cm(22.0")	40.68cm(16.0")	21.4cm(8.4")	20.3cm(8")
E	F	G	
46.8cm(18.4")	26.8cm(10.5")	32.01cm(12.6")	

### 460W-720W

A	B	C	D	E
60.2cm(23.7")	36.6cm(14.4")	31.48cm(12.4")	37.5cm(14.7")	35.4cm(13.9")
F	G	H	I	
20.25cm(8.0")	55.0cm(16")	24.5cm(9.6")	35.1cm(13.8")	

# Accessories

## Bracket Options



INS-A  
Top Fixed Installation

INS-B  
Under Mount Yoke (with driver box)

INS-C  
Under Mount Yoke (split mode)

INS-D  
Yoke Mount



Photocell



Steel rope



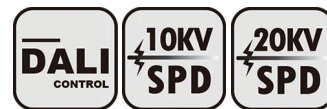
Laser aiming



Visor



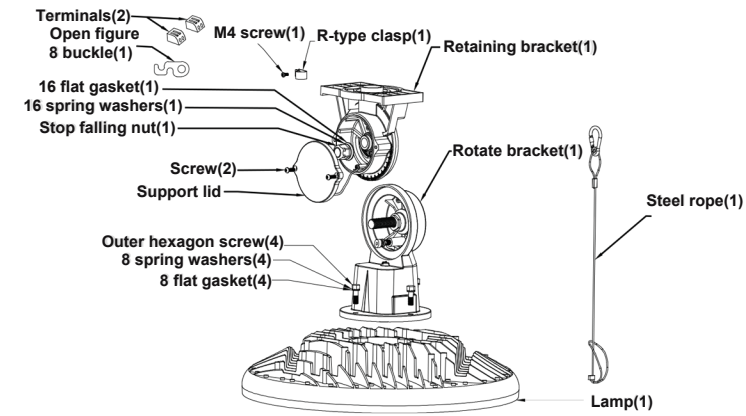
Timing control



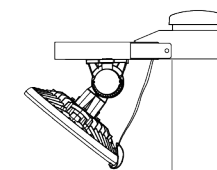
\*As the products are upgraded, the accessories may differ from those described in the pictures. Please consult with our sales team for updated details and order separately.

# Recommended Installation

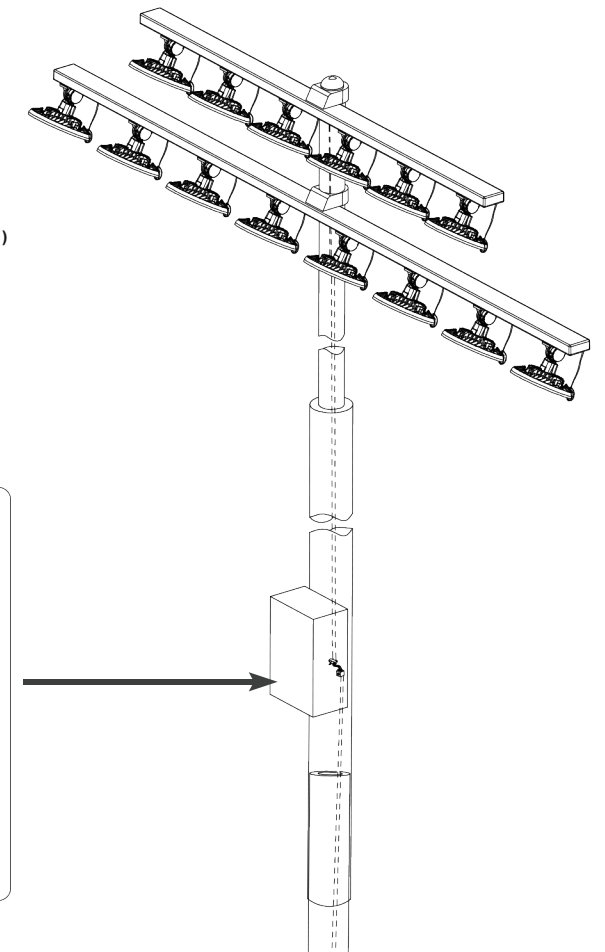
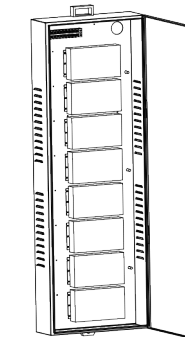
## INS-A



Installed schematic diagram:

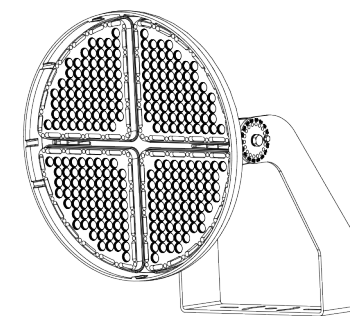


Schematic diagram of power chamber:

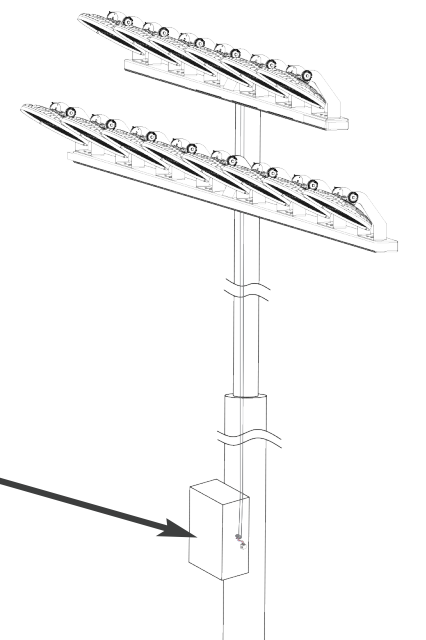
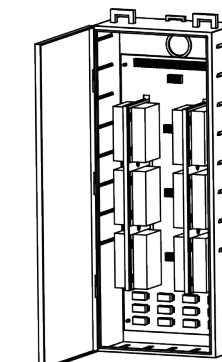


## INS-C

Installed schematic diagram:



Schematic diagram of power chamber:



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