



Explosion Protection by SUREALL



Product Catalogue

**Explosion Protected LED Luminaires
for Use in Hazardous Locations**



SUREALL TECHNOLOGY LIMITED

SHF-IIA Series LED Floodlight

Class I, Div.2, Group A, B, C, D Hazardous Locations
 Class II, Div.1, Group E, F, G UL/cUL Listed
 Class III Wet Locations, Type 4X, IP66
 Class 1, Zone 2, Ex e IECEx/ATEX



Model	Luminous Flux(LM)	Wattage	Lumen/Wattage	Equivalent HID luminaire
SHF-IIA-20W	2800	20W	140	70-100W
SHF-IIA-40W	5600	40W	140	100-150W
SHF-IIA-60W	8400	60W	140	175-250W
SHF-IIA-80W	11200	80W	140	320-400W
SHF-IIA-100W	14000	100W	140	400W
SHF-IIA-120W	16800	120W	140	400-600W
SHF-IIA-150W	21000	150W	140	600-750W
SHF-IIA-200W	28000	200W	140	750-1000W



Applications

- For areas with mounting heights of 10-50ft (3-15m)
- Oil and gas refineries, drilling rigs, petrochemical facilities, land-based and offshore rigs, mining, areas include derrick, mast, SCR house, top drive, operator's house, power and pump stations, and where flammable vapors, gases, ignitable dusts, fibers or flying are present
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist; Type 4X, marine, wet locations and hose-down environments
- Classified and hazardous locations

Features

- Instant illumination and restrike, cold temperature operation/no warm-up required
- Independent chamber for LED module, driver and wiring, high reliability and easy installation and maintenance
- Latest LED Technology: Cree/Nichia high efficiency LED exceed 160lm/w, fixture lumen efficiency exceed 140 lm/w
- High Reliability Driver: high reliability, efficiency exceed 98%, design for harshest environment
- Energy-efficient technology: up to 75% energy savings over HID fixtures
- Excellent Heat Sink Dissipation Performance: Lower LED and driver temperature, longer service life
- Operating Ambient Temperature: -40° C ~ +55° C
- Beam Angel: standard diffused, 40° , 60° , 90° , 120° for option

International Certifications

IEC Standard

IEC60079-0, IEC60079-1, IEC60079-31, IEC60079-2-1

Ex e IIC T6 Gc

Zone 1, Zone 2; Zone 21, Zone 22

IP66

EU Standard

EN60079-0, EN60079-1, EN60079-31, EN60079-2-1



II 3 G Ex e IIC T6 Gc

Zone 2; Zone 22

IP66

NEC & CEC Standard

Class I, Div.2, Group A, B, C, D

Class II, Div. 1, Group E, F, G

Class III

Wet Locations, Type 4X, IP66

UL Standard

UL844, UL1598, UL1598A

CSA Standard

CSA C22.2 No.137

Standard Materials

- Lamp housing and adapter – die cast aluminum with anti-corrosion powder coat
- Lens – heat-resistant and impact-resistant tempered glass
- Gaskets – silicone
- External hardware – carbon steel or stainless steel
- Factory sealed, no external seals required

LED System

- High intensity discrete power emitters
- Standard: cool white (5000K); optional: warm white (3000K); nature white(4000K)
- Brand-new LED chips

LED Driver

Input Voltage	100–277V AC 50/60Hz,	
	200–480V AC 50/60Hz	
THD	<20%	
Power Factor	0.98 (220V/full load)	
Protection	Short Circuit/Over Voltage/Over Heat	
	Surge Protection	Line to line 4KV
		Line to earth 10KV
IP	IP67	

Catalogue Numbering System

SHF-IIA

20

B

N

W

V

1

Lamp

Mounting Type

Cable Entry

Color Temperature

Voltage

Beam angle

20–20W

B-Bracket

N-NPT3/4"

C-Cool(5000K)

V1:100–277V AC

1–120°

40–40W

M- M25x1.5

N-Nature(4000K)

V2:200–480V AC

2–90°

60–60W

W-Warm(3000K)

3–60°

80–80W

4–40°

100–100W

120–120W

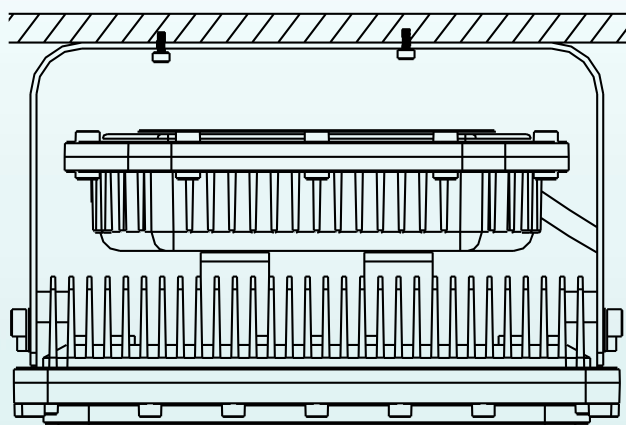
150–150W

200–200W

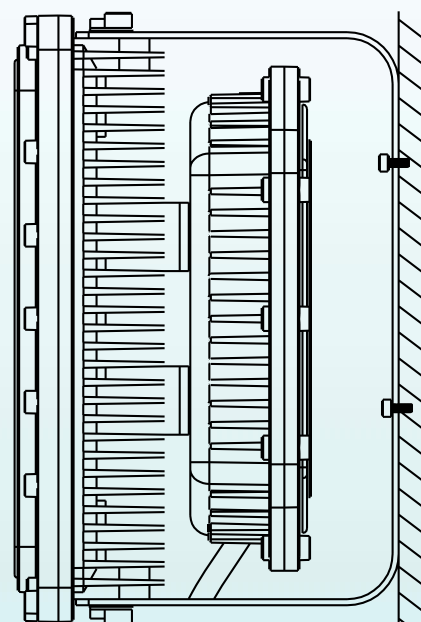
Technical Datasheet

Classification	Class I,Div.2,Group A,B,C,D Class II,Div.1,Group E,F,G Class III Class I, Zone 1,Zone 2,Ex e							
Standards	IEC60079-0, IEC60079-1, IEC60079-31, IEC60598-2-1 EN60079-0, EN60079-1, EN60079-31, EN60598-2-1 UL844, UL1598, UL1598A CSA C22.2 No.137							
Ex-mark	Ex e IIC T6 Gc Ex e IIC T80 Gb IP66							
Rated Voltage	AC 100-277V 50/60Hz AC 200-480V 50/60Hz							
Rated Wattage(W)	20W	40W	60W	80W	100W	120W	150W	200W
Luminous Flux(LM)	2800	5600	8400	11200	14000	16800	21000	28000
Color Temperature	2900K-5000K							
IP Grade	Wet Locations, Type 4X, IP66							
Ambient Temperature	-40° C ~ +55° C / -4° F ~ +131° F							
Cable Entry	M25*1.5 or NPT3/4"							
Terminals	Terminals blocks ≤ 2.5mm ² , cable diameter 10-14mm							
Installation	Bracket							

Mounting Options & Dimensions (mm/inch)



Ceiling Bracket Mounting



Wall Bracket Mounting