

FA-168EX 184mm RECTANGULAR SPOT/FLOOD LED LIGHTING FIXTURE



The FA-168EX Flameproof, Zone 1 Fixture is designed to perform multiple lighting functions on offshore production platforms and drilling rigs. The fixture enclosure is comprised of cast marine grade aluminum, with a tempered, toughened glass window. The metal/glass construction provides superior performance to plastic products in high temperature and high UV marine environments.

The FA-168EX is designed to house state of the art high flux LEDs. For the Spotlight applications, the LED arrays are mounted on a stainless steel, parabolic reflector. The highly efficient reflector uses a state of the art dichroic hybrid spectral metal coating. The LEDs are mounted on metal core PCBs with patented integrated heat pipes to cool the LED arrays **without a cooling fan**. This highly efficient, passive, cooling system gives the LED array the highest design life in the marketplace (greater than 60,000 hours).

The LED electronic controller is housed in a separate housing. It provides current limiting to the LED array. Nominal controller input is 24 volts to accommodate standby batteries. Input voltages including 110V/220V 50-60HZ are also available. The LED controller may be located as much as 500 meters away from the light.

FA 168EX spotlight meets CAP437 and ICAO signaling requirements.

On approximately 22.5m x 22.35m helideck, the average illumination values are 18.8 lux for the "H" and 20.6 lux for the helideck.

Dimensions: 180mm x 180mm x 146mm.

Weight: 8.5 kg

FORM No.: 072011A

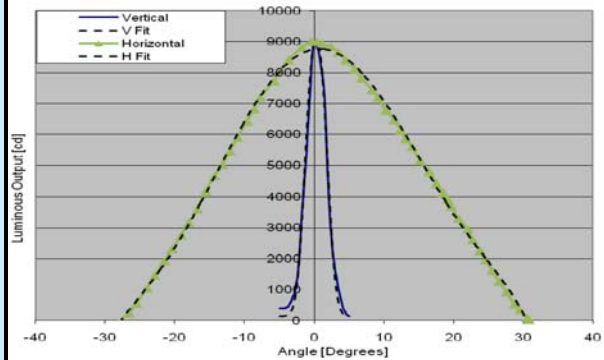


Figure 1 - FA-168 EX Spotlight max candela. The dark line in the graph is experimental data for the horizontal axis of the flood lamp.



MODEL FA-168EX SL

FA-168EX-SL Rectangular Spotlight, 25 Watt 2500 Lumen White LED Array providing a low dazzle 3 degree vertical by 35 degree horizontal illumination for helidecks and other area illumination requirements.

CENELEC/ATEX/IEC Ex

- II 2 G Ex d IIC T3...T6
- II 2(1) GD Ex d [ia/ib] IIC T6
- II 2 D Ex tD A2I T85°C
- II 2 D Ex tD [iaD/ibD] A21 T85°C

Patent No.: US 7,461,952



Comparison between FA-168EX LED and Xenon Helideck Illumination Light

Comparison	API FA-168EX	Xenon Spotlight
Number of Lights Required	4	4
Illumination Source	LED	Xenon Lamp
Light Source Life	Greater than 50,000 hrs.	1,000 hours
Power Consumption	20 W (80W total)	50 W (200W total)
Total Lumens	8000 Lumens	4 000 Lumens
Photometrics	3 deg V, 35 deg H	3 deg V, 5 deg H
Illumination (Average)	20.6 lux on helideck 18.8 lux on "H"	13 lux on helideck 4.4 lux on "H"
Cost	Approx. 1/2 the cost per light	Approx. twice the total cost
Size	180 x 180 x 146mm	185 x 420 mm
Protection	IP-66	IP 66/67
Temperature	-40 to + 55C	-20 to +40C
Ease of use	Once installed, no maintenance required.	Need to remove light to work shop to change lamp; disassembly of light required. Requires special tools and EX-certified personnel.

CERTIFICATE	ATEX 94/9/EC	IEC Ex
Execution	II 2 G Ex d IIC T3...T6 II 2(1) GD Ex d [ja/ib] IIC T6 II 2 D Ex tD A21 T85°C II 2 D Ex tD [jaD/ibD] A21 T85°C	II 2 G Ex d IIC T3...T6 II 2(1) GD Ex d [ja/ib] IIC T6 II 2 D Ex tD A21 T85°C II 2 D Ex tD [jaD/ibD] A21 T85°C
Ambient Temperature (Complete Assembly)	-40°C - +55°C	-40°C - +55°C
Ambient Temperature (Enclosure Only)	-60°C - +130°C	-60°C - +130°C
Protection Degree	IP66	IP66
Certificate Ref.	BKI 08 ATEX 048	IECEX BKI 09.0004
Rules of compliance	EN 60079-0; EN 60079-1; EN60079-11; EN 61241-0; EN 61241-1; EN 61241-11	EN 60079-0; EN 60079-1; EN60079-11; EN 61241-0; EN 61241-1

Specifications subject to change without notice

