

**ULF83000 SP Series
Hazardous Locations Class I, Division 2**



The OptoElectronix[™] ULF83000 SP Series Luminaire consists of a set of highly reliable LEDs with optics, thermal management with dimming capabilities. Constant current drive ensures uniform light distribution. Designed for recess mounting specifically for paint booth installation. Operates with input voltage range from 120VAC to 277VAC 50/60Hz.

Features

- Sealed Construction - with 16-gauge white powder-coated steel housing, non-glare translucent matte finish one side tempered glass
- Customized texture and matte finish tempered glass that ensure minimum glare and hot-spotting from the LEDs
- Recessed Mount with thin depth profile
- Withstands up to 71°C bake cycle for 90 minutes at power off
- In-rush Current Limiter (ICL) Circuit Protection
- Input Surge Protection: DM 4kV, CM 6kV
- IESNA LM80-08 Certified LEDs
- Analogue 1~10V or DALI-2 dimming options

Key Applications

ULF83000 SP Series was designed as a **Class I Div. 2** lighting fixture for installation in spray painting booths. Can be recess mounted on wall or ceiling.

Thermal Management

The heat-sink is incorporated into the ULF83000 SP Series design for reliable operation. Use of thermal profile and simulation enables the LEDs to operate at temperatures significantly below the maximum specification limits ensuring prolonged lifespan.

Light Transmission

The LEDs are shielded with non-glare translucent matte finish one side tempered glass achieving high level of light transmission and minimum hot spotting.

Regulatory Certifications

Safety Testing: UL certified for UL 844 Hazardous Class I Div. 2 Group ABCD, Spray Paint Listed, UL8750
UL 1598 Wet Location
UL certified for US, Canada

Ingress Protection Rating: IP65

IESNA LM80-08: LEDs used comply with LM80-08 standards with verifiable life-span

RoHS: Materials used are RoHS compliant

Product Specifications

ULF839VW SP01		
Input Voltage (nominal, AC, 50/60Hz)	volt	120 to 277
Total Power (typical)	watt	84
Power Factor		≥0.9
Luminous Flux (typical)	lumen	7,500
Luminous Efficacy	lumen/watt	89
Color Temperature	°K	5000
Color Rendering Index (CRI)		80
Dimmer Configuration		1~10V
Beam Angle	degree	120
Weight	kg (lb)	25.3 (55.8)

ULF839VW SP02		
Input Voltage (nominal, AC, 50/60Hz)	volt	120 to 277
Total Power (typical)	watt	173
Power Factor		≥0.9
Luminous Flux (typical)	lumen	15,000
Luminous Efficacy	lumen/watt	87
Color Temperature	°K	5000
Color Rendering Index (CRI)		80
Dimmer Configuration		1~10V
Beam Angle	degree	120
Weight	kg (lb)	26.0 (57.3)

ULF839VW SP03		
Input Voltage (nominal, AC, 50/60Hz)	volt	120 to 277
Total Power (typical)	watt	173
Power Factor		≥0.9
Luminous Flux (typical)	lumen	15,000
Luminous Efficacy	lumen/watt	87
Color Temperature	°K	5000
Color Rendering Index (CRI)		80
Dimmer Configuration		DALI-2
Beam Angle	degree	120
Weight	kg (lb)	26.0 (57.3)

ULF839VW SP04		
Input Voltage (nominal, AC, 50/60Hz)	volt	120 to 277
Total Power (typical)	watt	184
Power Factor		≥0.9
Luminous Flux (typical)	lumen	21,000
Luminous Efficacy	lumen/watt	114
Color Temperature	°K	5000
Color Rendering Index (CRI)		80
Dimmer Configuration		DALI-2
Beam Angle	degree	120
Weight	kg (lb)	26.6 (58.6)

Typical Environmental Specifications	
Operating Temperature	-20°C to +55°C
Thermal Management	No additional heat-sink required
Lumens Maintenance at L70	>50,000 hours
Warranty	5 years

Operating Conditions

A) Operating Voltage Ranges:

i. Product was designed to the Utilization Voltage Ranges specified in ANSI C84.1 ELECTRICAL POWER SYSTEMS AND EQUIPMENT – VOLTAGE RANGES (60 HERTZ) which specified Range A as the favorable working range while range B as the tolerable range.

Utilization Voltage Ranges per ANSI 84.1				
Nominal Service Voltage	Range B Minimum	Range A Minimum	Range A Maximum	Range B Maximum
120	104	108	126	127
277	204	249	291	293

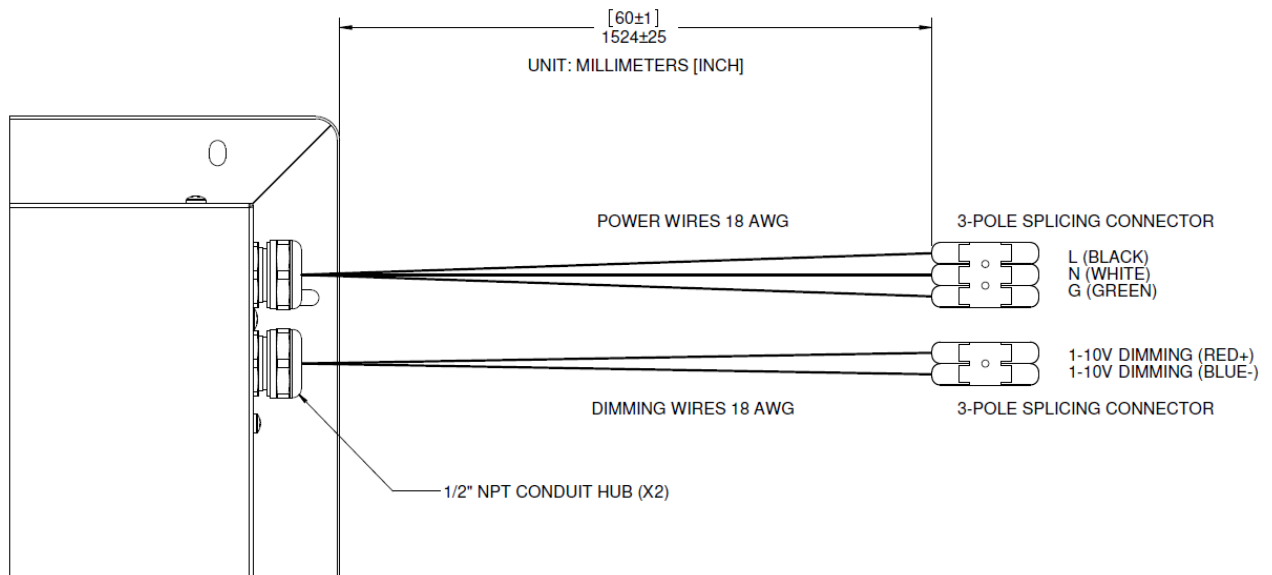
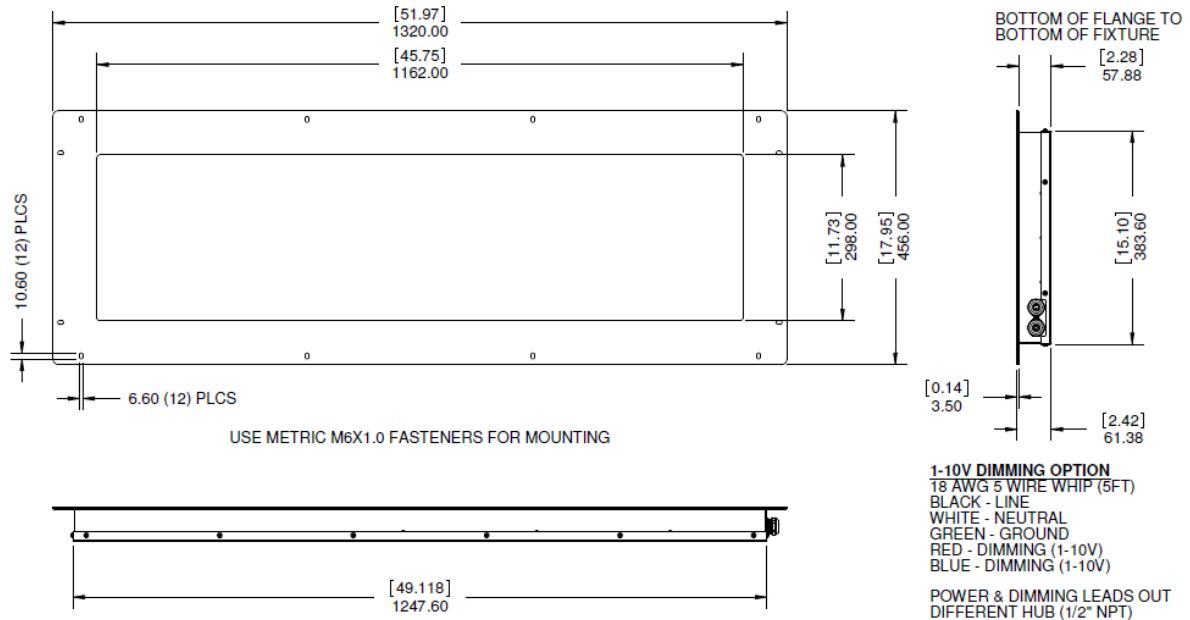
ii. The ULF83000 SP Series is operable at voltages within the Range B minimum of 120V (ie 104V) and the Range B maximum of 277V (ie 293V).

iii. In instances sustained voltage levels fall outside Range B maximum of 277V product may not operate satisfactorily, and protective devices may be needed.

Mechanicals

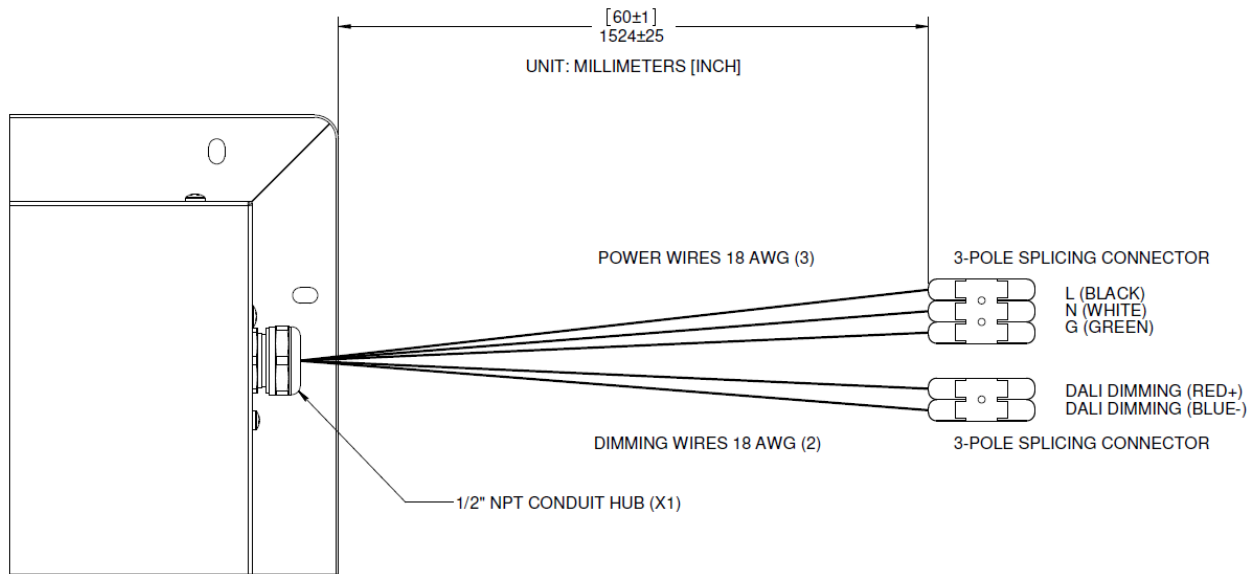
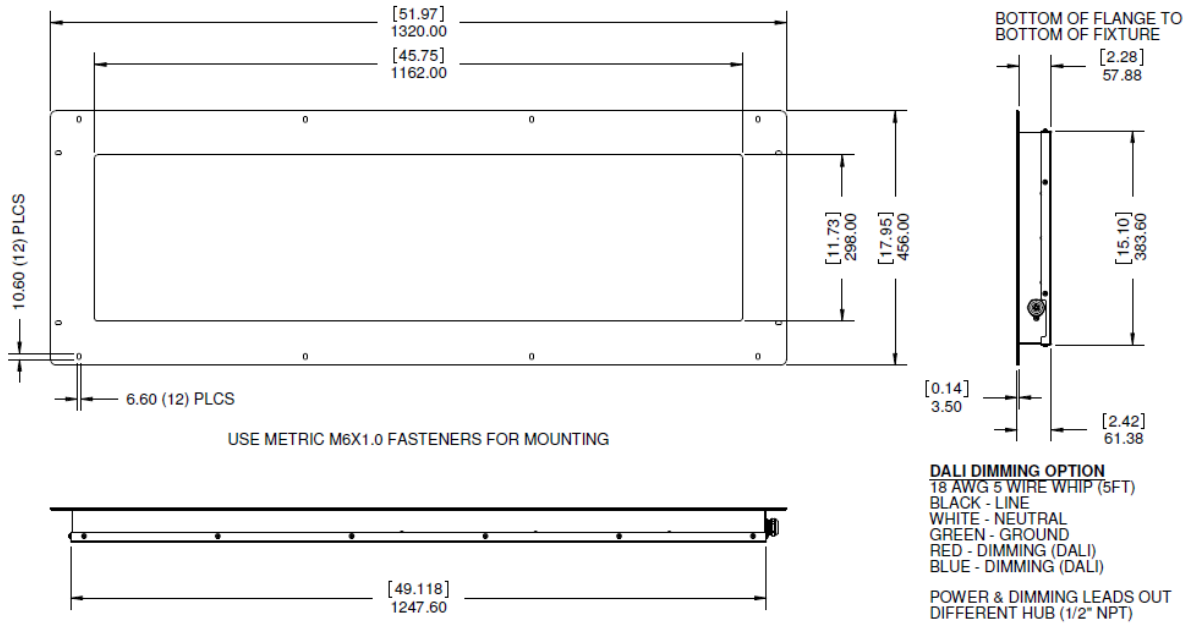
mm [inches]

ULF839VW SP01 & ULF839VW SP02



Wire Whip Connection

ULF839VW SP03 & ULF839VW SP04



Wire Whip Connection

ULF839VW SP0x (applicable to all models)

Panel Cut-out Dimensions

mm [inches]

