

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



The OptoElectronix<sup>™</sup> 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**

<b>ULF839VW SP01</b>		
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)

<b>ULF839VW SP02</b>		
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)

<b>ULF839VW SP03</b>		
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)

<b>ULF839VW SP04</b>		
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)

<b>Typical Environmental Specifications</b>	
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.

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

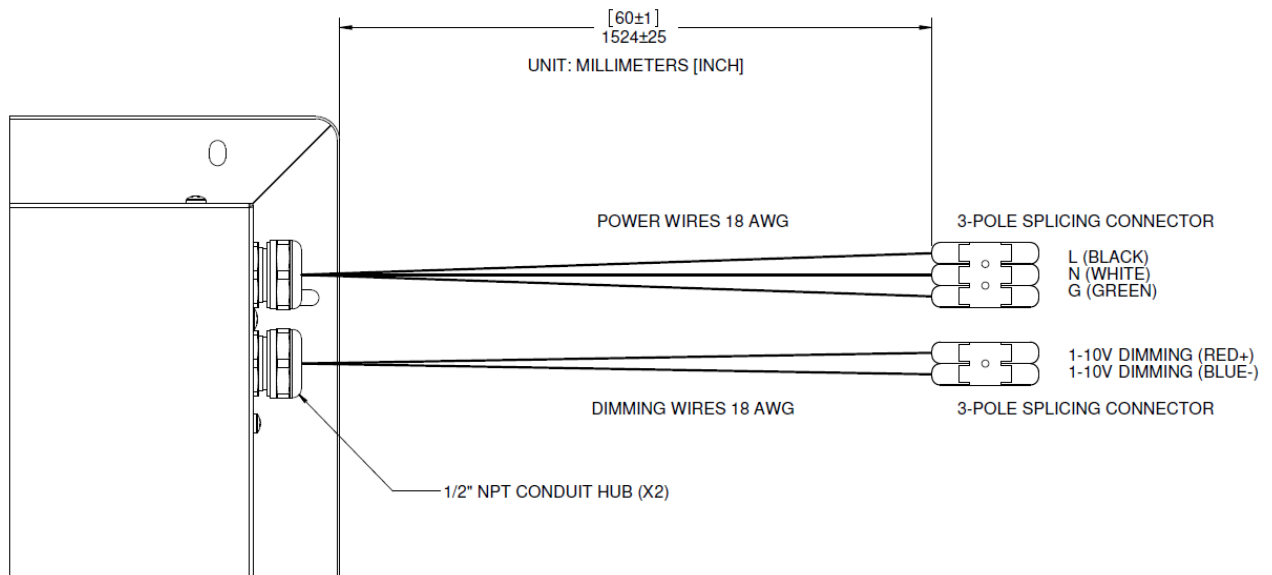
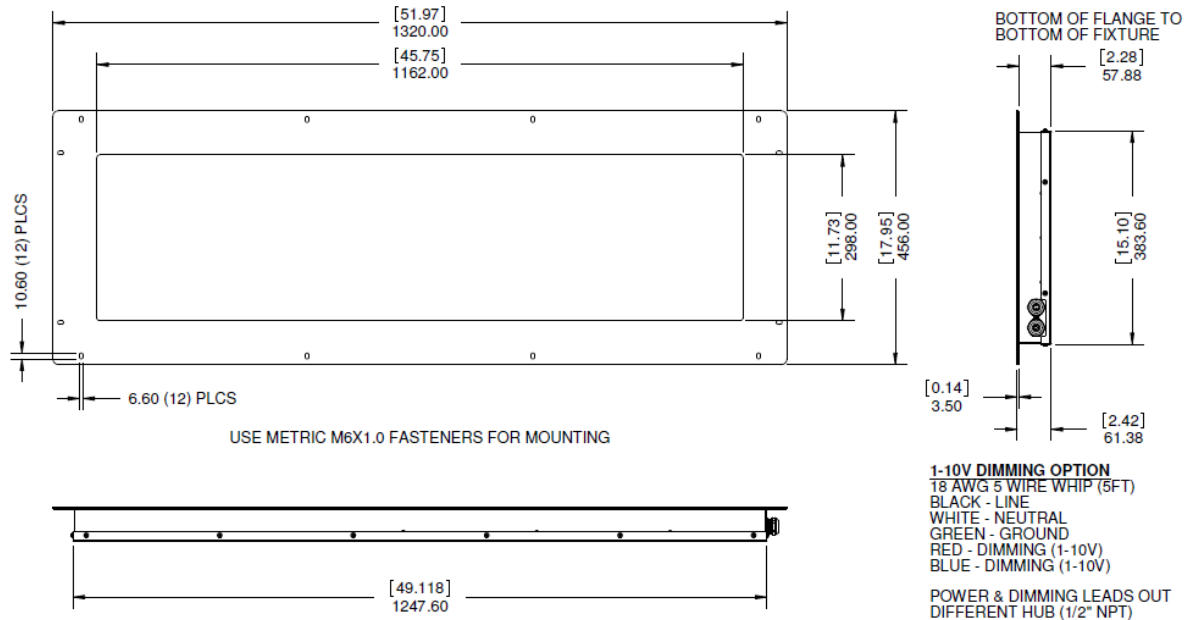
ii. The ULF83000 SP Series is operable at voltages within the Range B minimum of 120V (ie 104V) and the Range B maximum of 277V (ie 293V).

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**

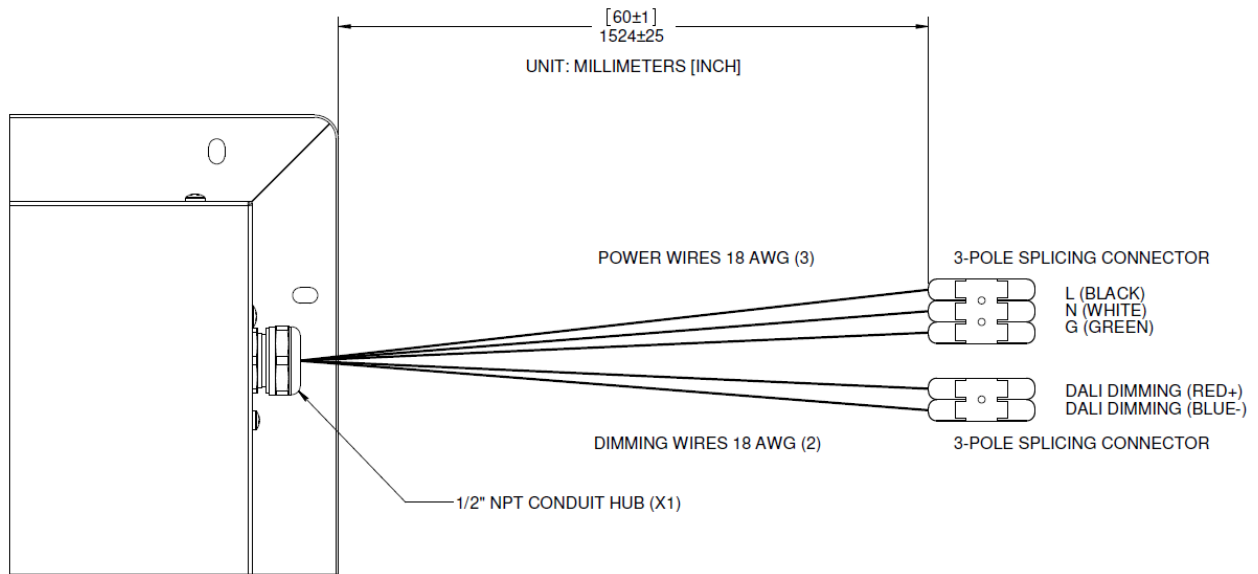
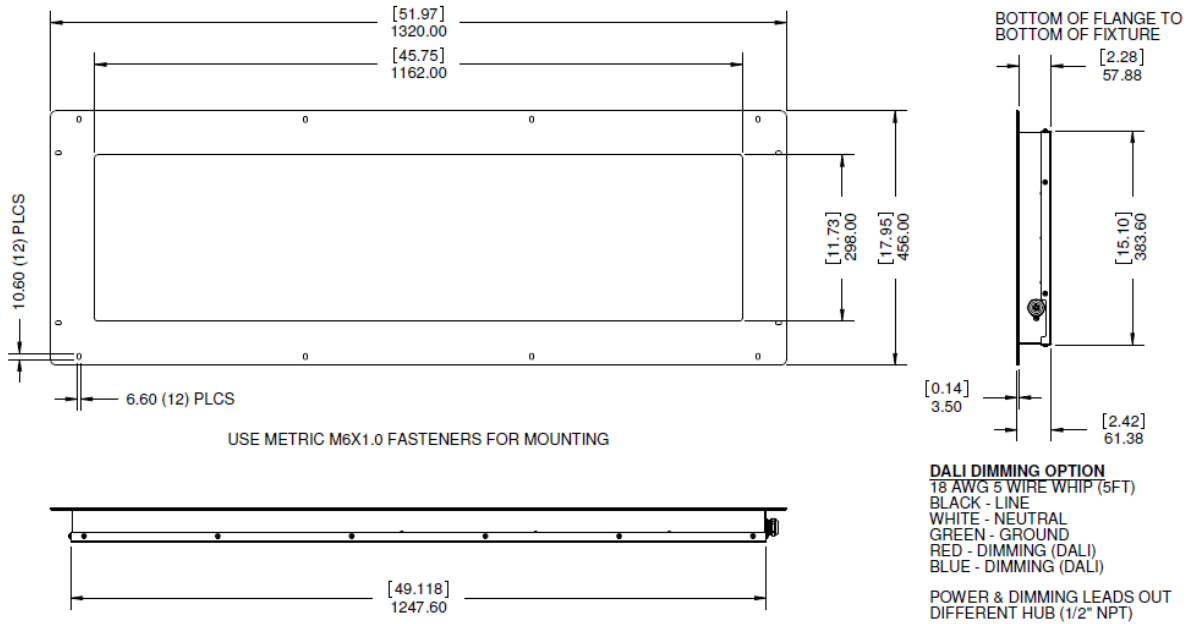
mm [inches]

**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]

