



LED Lighting | Forged in America™

# LED HazLoc Retrofit

## THE HIGH PERFORMANCE

*LED Luminaire Series for  
Parking Garages,  
Stairwells, Wet Locations,  
HazLoc and General  
Illumination*



### KEY FEATURES INCLUDE:



#### Advanced Thermal Management

Industry Leading Deep Fin Heat Sinks with Aircraft Grade Aluminum and 9" (23cm) [min] of perimeter conductive surface.



#### Long Lasting LED Chips

Surface Mounted Diodes (SMDs) last longer than their Dual In-Line (DIP) predecessors.



#### Multiple Color Options

Three color options ensure that the new lighting will match your current aesthetics, and allows for custom color options



#### Modular Design

12" modular PC Boards allow for a wide range of sizes to be cost-effectively manufactured.



#### 10 Year Warranty

Industry Leading 10 Year Warranty up to 60,000 hours of operation on all LED Tubes and external drivers.



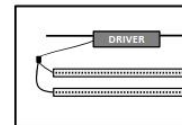
#### High Color Rendering

Colors are enhanced due to the use of LEDs selected directly on the black body curve.



#### Manufactured in America

With domestic and imported components. Factory: Southeastern PA. Higher quality control, faster delivery times, and new domestic job creation.



#### Independent Class II Driver

Safety, improved thermal management, and extended lifetime are gained by locating the driver remote from the LEDs.



5.19.2014

Philadelphia Headquarters: 487 Devon Park Drive, Suite 204, Wayne, PA 19087

[www.independenceLED.com](http://www.independenceLED.com) (484) 588-5401



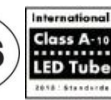
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## Pauluhn FWN - Hazardous Location Retro-Fit Kit Retrofit Kit for Class 1 Div 2

Luminaire Type	Number of LED Drivers & Model	
FWN217A - FWN217S FWN218A - FWN218S FWN220A - FWN220S	2 Model M9-U42-0220	

Specification Table	
Lamp Type	Linear LED Tube
Base	Bi-Pin G13
Environmental	Dry or damp locations only IP2X per EN60529
Operation	-4°F to +140°F/(-20°C to 60°C) <sup>4</sup>
Storage	-40°F to +185°F/(-40°C to +85°C)
Wattage	9W (nominal per tube)/18W (kit)
Flux	>900lm [100lm/W]
Color Temp	3500, 4000, and 5000K [ANSI binned]
CRI	>70
Input Voltage	110-277VAC (.3-.15A) 50/60Hz
Power Factor (PF)	>0.9
Total Harmonic Distortion (ATHD)	<20%
Life Time	>60k hrs
Retrofit Kit Rated Life	Calculated L70(6k) = 58k hrs
LED Tube per TM-21	Reported L70(6k) >36k hrs
LED Driver - MBTF	>100 hrs, MIL-HDBK-217F @25°C/(77°F)
Certifications	cUL, UL, FCC, ABS, CE
LM80 Data	NVLap Accreditation
Warranty	
LED Driver	10 years
LED Tube	10 years up to 60k hrs
Dimming	None
Tube (nominal)	
Diameter	T10/1.25"
Length	24"
Off State Power Consumption	0 Watts

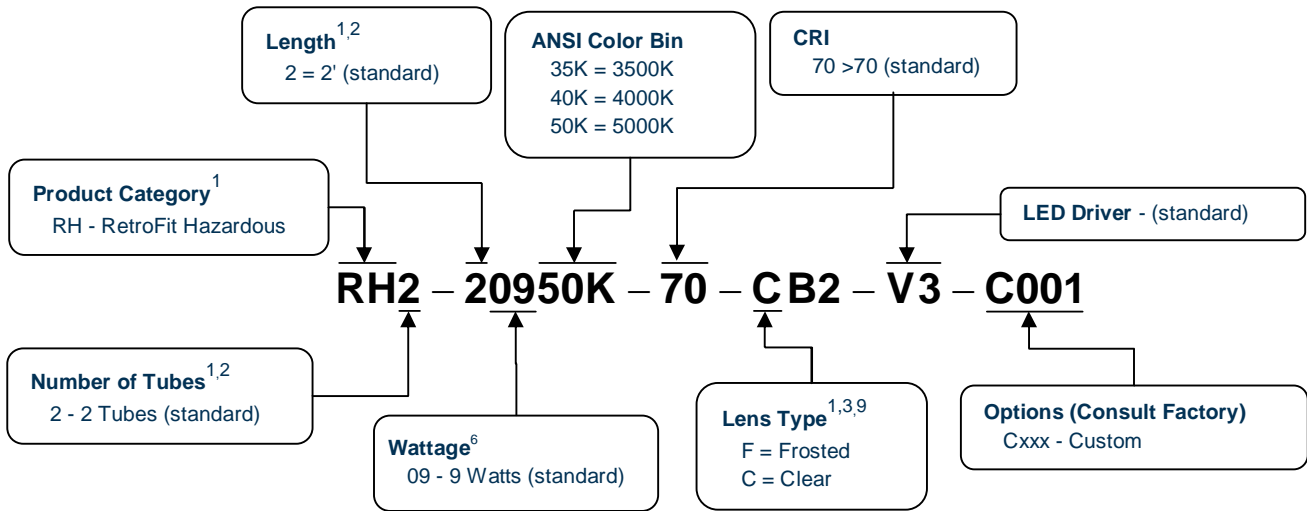


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## Most Popular

RH2-20950K-70-CB2-V3

Length (ft)	LED Tubes	Wattage (nominal)	Total Wattage <sup>6</sup> (W)	Lumens <sup>1,6</sup> @CRI
2	2	9	18	1800 @70

Single Tube Driver R1



## Notes

- Not all model combinations are available
- Extended lead times and minimums maybe required for some models
- Frosted lens has less output than clear lens
- Operation to -40°F/-40°C is available
- Specifications and availability subject to change without notice
- Varies depending on color temperature, CRI, LED driver and lens (±10%)
- Patent Pending: USA +40 Countries
- EPAct -179d tax incentive ready product given dimming bi-level switching requirements
- Certain chemicals that may exist in end-user locations release airborne contaminants that can impact the integrity and safety of key fixture components that contain acrylic or polycarbonate material.
- Worst case temperature for VTW2-429 @25°C.
- Consult website for further details





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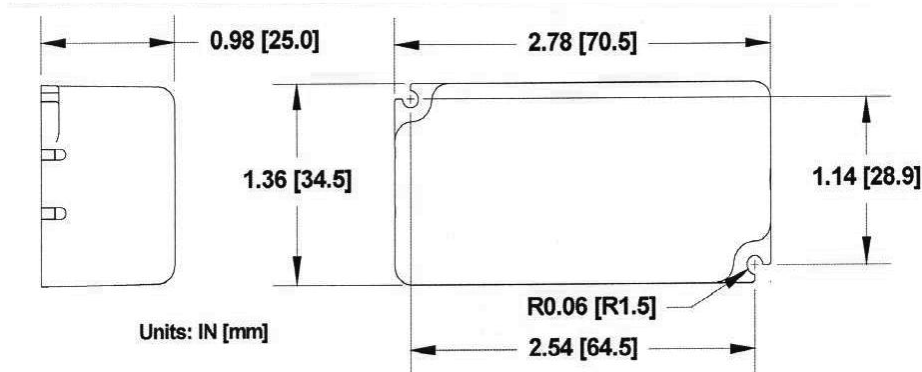
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## Compliance Standards

- UL 1993 - Self-Ballasted Lamps and Lamp Adapters, Ed. 4: 2012
- UL 1598 - Luminaires
- UL 1598C - Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kits
- UL 8750 - Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products, Ed. 1: 2009
- CSA C22.2 No. 250.13 - Light emitting diode (LED) equipment for lighting applications, Ed. 1222012
- EN 62471:2008 - Photo Biological Safety of Lamps and Lamp Systems
- EN 62031:2008 - LED modules for general lighting. Safety specifications
- EN 61347-1:2008 - Lamp controlgear. General and safety requirements
- EN 55015:2006 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
- EN 61347-2-13:2006 - Lamp controlgear. Particular requirements for d.c. or a.c. supplied electronic control gear for LED modules
- EN 61000-3-2:2006 - Electromagnetic compatibility (EMC). Limits. Limits for harmonic current emissions
- EN 61000-3-3:2008 - Electromagnetic compatibility (EMC). Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems
- EN 60598-1:2008 - Luminaires. General requirements and tests
- EN 61547:2009 - Equipment for general lighting purposes. EMC immunity requirements
- FCC Part 15, Subpart B, Class B -
- ANSI\_ANSL G C78.81-2010 - Electric Lamps-Double-Capped Fluorescent Lamps-Dimensional and Electrical Characteristics
- ANSI\_NEMA\_ANSL G C78.377-2008 - American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products
- ISO-9001:2008 Certification - The International Organization for Standardization fosters consistency in product delivery and quality assurance
- IEC 60529-2004 - Degrees of Protection Provided by Enclosures (IP Code)
- UL844 - Luminaires for Use in Hazardous (Classified) Locations
- C22.2 NO. 137-M1981 (R2009) - C22.2 NO. 137-M1981 (R2009) - Electric Luminaires for Use in Hazardous Locations

## Specification, LED Driver, V3

(Dimensions may vary)



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