

WARP9®-Small, PicoEmitter™ LED Upgrade Kit

revision 10/13/16 • kl\_wp9seledkit\_spec.pdf

Type: Job:

Catalog number:

LED Kit Electrical Module Option

CUL US



### Approvals:

Date:

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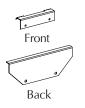
# **Specifications**

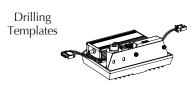
#### WP9S-LED-KIT

60 Light Emitting Diodes
Total Max System Watts = 66W
Maximum Weight = 30 lbs.
when installed in Warp9 LED



LED EmitterDeck®





Electrical Module

**Electronic Module:** All electrical components are UL recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Module includes a driver, LifeShield® temperature control device and surge protector. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. Driver is rated for -40°F starting and has a 0-10V dimming interface for multi-level illumination options.

**Optical Module:** Each precision, replaceable PicoEmitter is positioned to achieve directional control toward desired task. The entire EmitterDeck® fastens to the housing as a one-piece module.

**Listed to:** UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires. RoHS compliant. Meets Buy American provisions within ARRA.

**NOTE:** Existing product conditions are taken as the base point. Participation rules apply. See complete warranty provisions for further details.

**IMPORTANT:** Disable all power to the luminaire before conducting any maintenance or upgrade activity. Failure to do so will create a hazardous working environment.

**CAUTION:** Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

#### **Suggested Tools:**

- 3/8" Socket Wrench
- 5/16" Wrench
- Hammer; Drill Motor
- .626" (#20) Drill Bit
- Center Punch
- 1/4" Drill Bit





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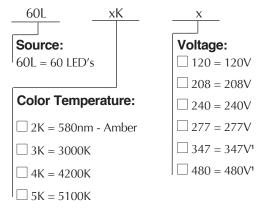


### **Standard Features**

#### WP9S-LED-KIT **Fixture** Cat. No. designates fixture **Upgrade Kit: Current:** and distribution Distribution: Optic: E = PicoEmitter™ 35 = 350 mAWP9S-LED-KIT $\square$ 1 = Type I $\Box$ 4 = Type IV $\square$ 2 = Type II $\Box$ 5 = Type V $\square$ 3 = Type III $\square$ L = Type L Left $\square$ R = Type R Right **Light Distribution:** TYPE V TYPE I TYPE II TYPE III TYPE IV TYPE IV-NB No Backlight TYPE R TYPE L One-Way Left One-Way Right

#### **Electrical Module**

Cat. Nos. for Electrical Modules available:



<sup>1</sup>Due to current unavailability of 347V and 480V drivers, specification of these voltages may feature an integral step-down transformer.



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	Standard Features
Finish Super TGIC powder coat paint over titanated zirconium conversion coating.	Color: Black Dark Bronze Light Gray Stealth Gray Platinum Silver White Custom Color¹ Cat. No.: □ BL □ DB □ LG □ SG □ PS □ WH □ CC ¹ Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description:
0-10V Dimming Interface	Driver has a 0-10V dimming interface with a dimming range of 10-100%. Is compatible with most control systems including Hubbell Building Automation wiHUBB <sup>TM</sup> . Approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV. Note: Not compatible with current sourcing dimmers. Controls compatible via Gray and Purple dimming lead.  Standard Input Black (+)  White (-)  Green (GND)  Gray Dimming Lead (-)  Purple Dimming Lead (+)  Housing  Fixture  Housing
	Optional Features
Neighbor Friendly Optic: Cat. No. ☐ NFO ☐ No Option	Integrated Neighbor Friendly Optic on each PicoEmitter <sup>TM</sup> module to completely control unwanted backlight. Most effective with Type III and IV distributions.
Fusing Cat. No. (see right)  ☐ No Option	High temperature fuse holders factory installed inside the fixture housing. Fuse included.  Line Volts: 120V 208V 240V 277V 347V 480V  Cat. No.: SF DF DF SF DF SF DF  Single Fuse



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## **Lumen Data**

Spectroradiometric						
	3000K Average	4200K Average	5100K Average			
Correlated Color Temp. CCT (K)	2800K - 3175K	3800K - 4600K	4600K - 5600K			
Color Rendering Index (CRI)	≤80	≤80	≤70			
Power Factor	>.90	>.90	>.90			

Projected Lumen Maintenance							
mA	100,000 hrs	Calculated L70					
350 mA	94.26%	719,000 Hrs.					

Electrical Drive Current @ 350mA							
Volts - AC	Amps - AC	System Watts					
120	0.55	66					
208	0.32	66					
240	0.28	66					
277	0.24	66					
347	0.19	66					
480	0.14	66					

<b>B.U.G. Rating for 350mA</b> (TM15) in Lumens where $B = Backlight$ , $U = Uplight$ , $G = Glare$								
Temperature	Type I	Type II	Type III	Type III NFO	Type IV	Type IV NFO	Type V	Type L/R
3000K	N/A	B1 U0 G1	B1 U0 G1	N/A	B1 U0 G1	B0 U0 G1	B2 U0 G1	N/A
4200K	N/A	B2 U0 G2	B1 U0 G1	N/A	B1 U0 G2	B1 U0 G1	B3 U0 G1	N/A
5100K	N/A	B2 U0 G2	B1 U0 G2	N/A	B1 U0 G2	B1 U0 G1	B3 U0 G1	N/A

Absolute Lumens for 350mA								
Temperature	Type I	Type II	Type III	Type III NFO	Type IV	Type IV NFO	Type V	Type L/R
3000K	N/A	4663	4599	N/A	4703	3709	4753	N/A
4200K	N/A	6090	6006	N/A	6142	4844	6208	N/A
5100K	N/A	6477	6387	N/A	6531	5151	6601	N/A

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library. For custom optics and color temperature configurations, contact factory.

For warranty see http://www.hubbelllighting.com/resources/warranty