

BRIGHT LIGHT, TINY PACKAGE.



## Materials included in kit:

- 1. LED Engin ViviLuxTM Emitter, mounted on connector board: LZC-F0WH00-0030
- a. CCT: 3000K nominal
- b. CRI=90
- c. R9>70
- d. 2x6 parallel configuration; typical Vf of 17 VDC
- 2. LED Engin TIR secondary options (3)
- a. LLNF-4T08-H: ViviLuxTM Narrow Flood (24°) Lens with holder
- b. LLFL-4T08-H: ViviLuxTM Flood (35°) Lens with holder
- c. LLWF-4T08-H: ViviLuxTM Wide Flood (45°) Lens with holder
- 3. Cooliance Coolstrate High Power LED Heatsink Cooler and wiring harness:
- CSL-5050-SQ-L01 & CSL-WH-18 (respectively)
- 4. 3M Thermally Conductive Interface Pad (Acrylic Elastomer) pre-cut for
- LED Engin LZC 49.9 mm diameter MC-PCB: 5590-H-50
- 5. Mean Well, 25 W, Single Output, LED Power Supply: LPC 35 1400
- Input Voltage VAC:90V to 264V 1400 mA; 700 mA per LED string
- 6. Stand-off legs (4): Imperial Supplies well nuts, P/N: 38025-4
- 7. Well nut screws (4): McMaster-Carr, P/N: 92470A155
- 8. M3 LED screws (4) and plastic washers (4): McMaster-Carr
- 10. Wire nuts (2) for low voltage connections: P/N 73B
- 11. Wire, 305 mm (12") red 20 AWG wire for positive (+) connections
- 12. Wire, 305 mm (12") black 20 AWG wire for negative (-) connections

## Required for assembly (Not Included)

- 1. Small Phillips or flat-blade screwdriver
- 2. Extraction tool for AVX poke-home connectors:
- a. Miniature Precision Screwdriver, 1.2 mm (0.047") Tip Width or
- b. Thin Blade Wire Extraction Tool: AVX P/N: 00692-7670-0101-000





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## **Assembly Instructions**

- 1. If the Starter Kit assembly will be used for demonstration on of the cooler requires clearance from the table top surface. Wen nuts and extended screws are supplied with the kit to provide this option.
- 2. To adopt the assembly for this orientation, remove the screws from the base of the Cooliance Coolstrate High Power LED Heatsink Cooler one by one and replace them with the supplied extended screws and well nuts.
- 3. Remove the protective cover from one side of the 3M Thermally Conductive Interface Pad (Acrylic Elastomer) pre-cut for LED Engin LZC 49.9 mm diameter MC-PCB: 5590-H-50 and carefully adhere it to the backside of the LED emitter/board, lining up the cutouts with the holes in the LED emitter/board.
- 4. Remove remaining protective cover from the 3M Thermally Conductive Interface Pad and place the LED emitter/board onto the top of the Cooliance Coolstrate High Power LED Heatsink Cooler ensuring that the screw holes are visible and orienting it so that the LED wire connector on the LED emitter/board is positioned on the same side of the Cooliance Coolstrate High Power LED Heatsink Cooler as the fan connectors.
- 5. Attach the LED emitter/board to the Cooliance High Power LED Heatsink Cooler using four (4) M3 screws and plastic washers. This should be done by tightening the M3 screws in a sequence of steps analogous to how one tightens the lugs for the wheel of an automobile. Maximum torque should not exceed 1 Nm (0.74 lb·ft). 6. Attach the wiring harness connector to the Cooliance Coolstrate High Power LED Heatsink Cooler.
- 7. Attach wires to the LED emitter/board connector that is marked "LED." Red wire positive (+); Black wire negative (-). Poke-home connectors have a friction fit. You should push wires in all the way and give a slight tug to confirm they are engaged. Double check your work to insure proper polarity. The negative lead (black) should be on the outside edge of this connector. The connector for the thermistor will not be used.
- 8. Using a single wire nut, connect all red wires from LED emitter/board, Cooliance Coolstrate High Power LED Heatsink Cooler and the low voltage side of the Mean Well, 25 W, Single Output, LED Power Supply together.
- 9. Using a second wire nut, connect all black wires from LED emitter/board, Cooliance Coolstrate High Power LED Heatsink Cooler and the low voltage side the Mean Well, 25 W, Single Output, LED Power Supply together.
- 10. Connect the high voltage side of the power supply to the Leviton, plug, AC, 2-blade, polarized, P/N: 101-EP, using the instructions included with the plug. Note the narrow-blade should be connected to the ACL (BROW) wire using the GOLD/BRASS-colored screw.
- 11. Select one of the TIR and place on top of the LED board in the alignment openings.
- 12. You are ready to power up your new LED Engin ViviLux™ Starter Kit!

NOTE: The output of this LED is very bright. Do not look directly into the LED. here will be a 1-2 second delay from the time the supply is connected to power and the time the LED lights up. Periodically check that the fan is turning and has not been blocked or stopped by a foreign object. This product requires forced air for proper cooling. 13. Secondary Optics: There are three (3) beam angles offered in the kit for evaluation. Each holder can be mounted on top of the connector board. Do not attempt to change the lens without disconnecting the LED from power. If you choose to permanently attach a lens holder to the LED assembly, use an epoxy or polyurethane-based adhesive (for instance: Dow Corning 3145 room temperature vulcanizing (RTV) silicone). Cyanoacrylate adhesive (commonly sold under trade names like "Super Glue" and "Krazy Glue") should not be used to avoid contamination of the lens (blooming of the epoxy). The lens can also be held in place by mechanical means.

14. Congratulations! Now enjoy your LED Engin ViviLux™ Starter Kit!

