



ecostar 

ESRP-4EH

VERTICAL REFRIGERATOR LIGHTING

INSTALLATION GUIDE

for 4" Lens Projection Depth

**UNIQUE
LIGHTING
SOLUTIONS**

USLED™
Always the Right Choice!

WARNING



- The retrofit installation must only be performed by a licensed electrician.
- To prevent death, injury or damage to property this product must be installed in accordance to National Electric Code (NFPA 70) in the US or Canadian Electrical Code (CSA22.1) in Canada.
- Disconnect power before installing the product or servicing it.
- Use only with Class 2 power unit.

MODEL NUMBERS

This installation instructions covers the following products:

Power Supplies

1. 100W Power Unit: PSA-24-100-LE

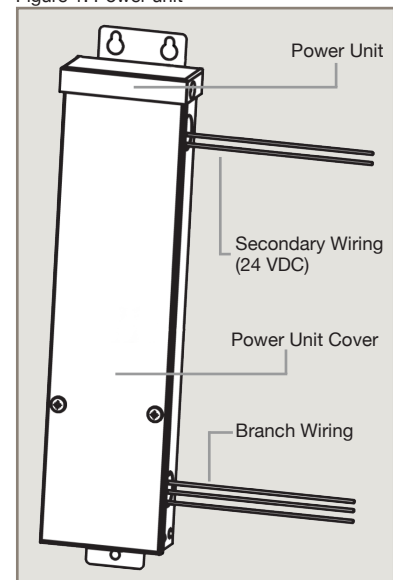
Luminaires

1. ESRP-4EH Series Luminaires

POWER UNIT INSTALLATION

1. Secure power unit (Figure 1) in suitable location.
2. Remove cover from power unit.
3. Connect secondary wiring (24 VDC) per local code according to supplied wiring diagram. Recommended cable is solid 18AWG NEC Class 2 cable.
4. Connect branch wiring per local code according to supplied wiring diagram. (Note: Minimum primary wire size is 16 AWG 300 Volt)
5. Power unit must be grounded using the green wire located in the primary wire cavity of the power unit.
6. Install power unit cover.

Figure 1: Power unit



INSTALLATION INSTRUCTIONS

1. EcoStar uses one Mounting Bracket per unit mounted on the back side of the mullion, inside the cooler.
2. Secure Mounting Bracket with the base against and parallel to the mullion using two self-drilling screws positioned between the two ribs on the base of the bracket (Figure 2). Position screws vertically as far apart as possible with the screws located between shelves for easy access with a cordless screwdriver. Carefully move product on the shelf to provide sufficient clearance to work.

Note:

Center unit Mounting Bracket is bi-directional.

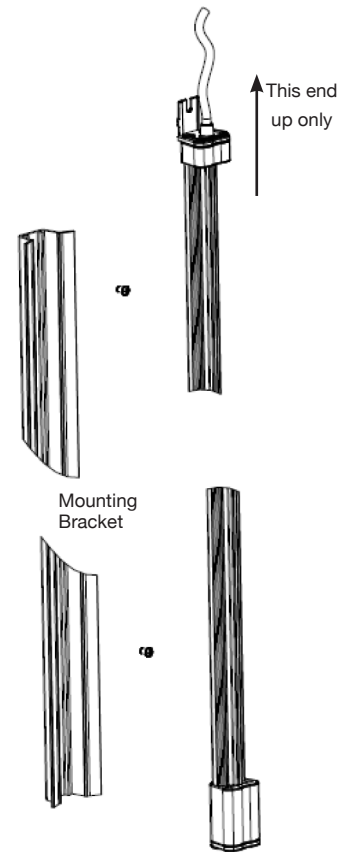
End unit Mounting Bracket cut-off wing must be positioned in the direction of light.

3. Press the EcoStar unit into the Mounting Bracket "U" channel, between the two end caps of the EcoStar unit, with the lens portion facing inside the cooler. Verify that the EcoStar unit snaps tightly into the "U" channel of the Mounting Bracket.

Note: Mount EcoStar system with wire end up.

4. See wiring diagram for EcoStar system wiring.
5. Secure cable to the mullion and cooler walls.
6. Repeat all steps for each EcoStar unit.
7. Energize.

Figure 2: EcoStar end unit shown



POWER SUPPLY CONFIGURATION

1. Determine how many power supplies are needed.

| Unit Type | Power Calculation (Watts) | Total Watts | Power Supply Quantity |
|-----------|-----------------------------------|-----------------------------------|---|
| Center | 1.9 x door height x unit quantity | Sum of Centers, Lefts & Rights | Divide Total Watts by 100, round up to nearest whole number |
| Left end | 1.2 x door height x unit quantity | | |
| Right End | 1.2 x door height x unit quantity | | |

2. Wire appropriate number of EcoStar units to each power supply.

| Unit Type | Power Calculation (Watts) | Power Supply Loading |
|-----------|---------------------------|---|
| Center | 1.9 x door height | Wire as many Centers, Lefts and Rights to single power supply as long as total Watts is less than 100 |
| Left end | 1.2 x door height | |
| Right End | 1.2 x door height | |

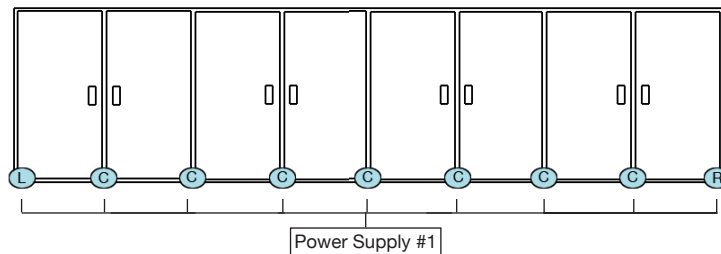
Example Calculation: 8-door, 6-foot case

| Unit Type | Watts/ Foot | Door Height | Unit Quantity | Total Watts |
|-----------|----------------|----------------|------------------|----------------|
| Center | 1.9 | 6 | 7 | 117.6 |
| Left end | 1.2 | 6 | 1 | 11.4 |
| Right End | 1.2 | 6 | 1 | 11.4 |

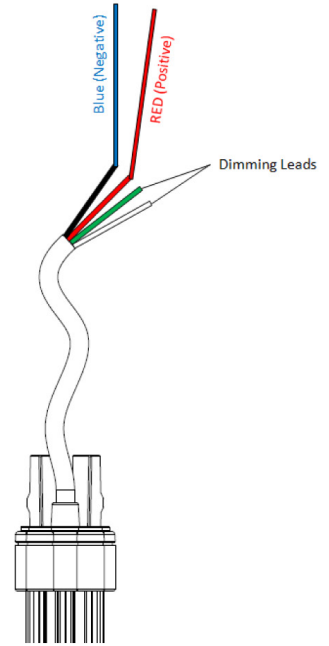
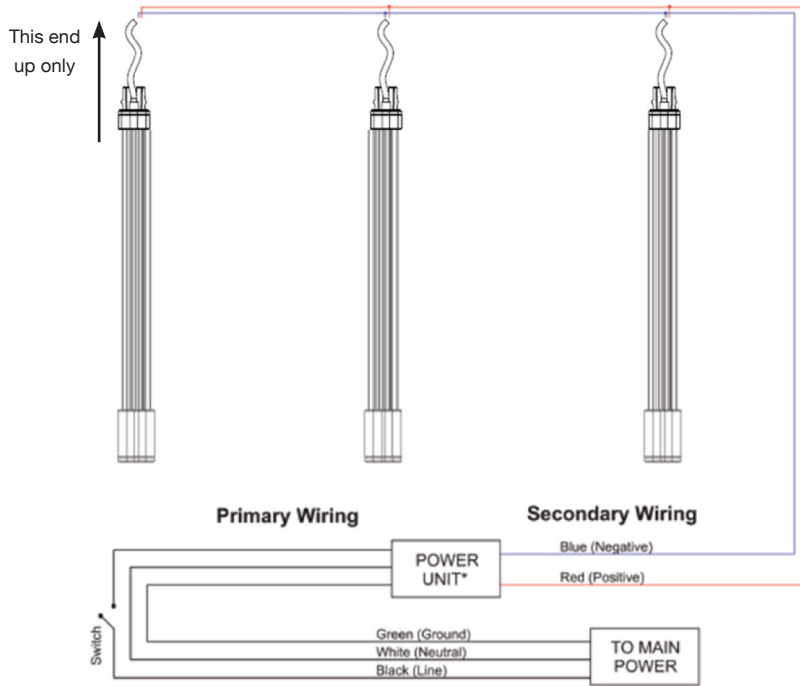
$94.2 / 100 = 0.94$ (round up to 1)

Example Door Setup: 8-door, 6-foot case

- 8-Door**
 7 x EcoStar Center Unit
 1 x EcoStar Left Unit
 1 x EcoStar Right Unit
 1 x Power Supply



WIRING DIAGRAM



ESRP-4 Wiring

Power Supply Cable
Blue (Negative) - - - Black wire
Red (Positive) - - - - Red wire

Dimming Leads
Green - - - D+
White - - - D-