HUSSMANN®

Multi-deck Canopy, Shelf, & Rail LEDs



Upgrade Installation Guide



IMPORTANT

Keep in Store for Future Reference

ECOSHINE ULTRA LEDs

Installation & Specifications Guide

P/N 0524791_J October 2021 Spanish P/N 0527937

MANUAL- KIT ECOSHINE ULTRA LED, MULTI-DECK



BEFORE YOU BEGIN

Read the safety information completely and carefully.



SAFETY

Please wear all required personal protective equipment according to OSHA regulations, and be sure to comply with the precautions described in this manual to protect you and others from possible harm. The ANSI definitions below detail and clarify the magnitude and urgency of potential harm, damage and problems arising from misuse or improper installation. Relative to their potential danger, the definitions are divided into four parts as defined by ANSI Z535 Series.

ANSI Z535.5 DEFINITIONS

• DANGER – Indicate[s] a hazardous situation which, if not avoided, will result in death or serious injury.



• **WARNING** – Indicate[s] a hazardous situation which, if not avoided, could result in death or serious injury.



• **CAUTION** – Indicate[s] a hazardous situation which, if not avoided, could result in minor or moderate injury.

• **NOTICE** – Not related to personal injury – Indicates[s] situations, which if not avoided, could result in damage to equipment.

WORKING NEAR THE PUBLIC

Cordon off all work areas with cones, caution tape, warning signs and/or barricades. Maintain a work area of at least 5 feet from the public. Is a second person required to prevent the public from entering the work area when the work area cannot be adequately cordoned off?

ELECTRICAL HAZARDS

Are all live electrical hazards protected from public access; i.e., de-energized/locked out or cordoned off? Is proper signage in place? Make sure the work area is cordoned off.

ELECTRICAL / LOTO

Does the project require you to work with live electricity? If yes, have you received appropriate training? Do you have appropriate locks and tags to de-energize or isolate the electrical supply?

- Read and observe all CAUTIONS and WARNINGS shown throughout these instructions.
- Each person working on or near the installation described must wear safety glasses or goggles.
- Block access to the work area by customers or other personnel to prevent injury.
- Read and follow all industry safety recommendations and established procedures.
- \bullet Wiring must be 2 wire with ground and rated for 75°C (176°F).

REVISION HISTORY

REVISION *J* — Added new horizontal ULTRA LEDs

Risk of fire or electric shock. Luminaire wiring and electrical parts installation requires knowledge of electrical systems. Only qualified service technicians shoould install or service this equipment. If not qualified, do not attempt installation. Contact a qualified electrician.

— LOCK OUT / TAG OUT —

To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.

A WARNING

— LOCK OUT / TAG OUT — To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as lights, fans and heaters.

NOTICE

Only those open holes indicated in the photographs and / or drawings may be made or altered as a result of kit installation. Do not leave any other open holes in an enclosure of wiring or electrical components.



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IMPORTANT KEEP IN STORE FOR FUTURE REFERENCE Quality that sets industry standards!

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12999 St. Charles Rock Road • Bridgeton, MO 63044-2483 U.S. & Canada 1-800-922-1919 • Mexico 01-800-890-2900 *www.hussmann.com* © 2021 Hussmann Corporation

GENERAL INFORMATION

LED LIGHT FIXTURES

EcoShine ULTRA LEDs were specifically designed to maximize product appeal and reduce energy costs. These LEDs work well for dimming or on/ off operation using an occupancy sensor (optional kits). They can be turned on and off in a cold environment with no warm-up time and no negative impact on lamp life. This instruction explains how to remove original equipment manufactured (OEM) fluorescent lamp fixtures and replace them with Hussmann LED light bars.

ELECTRICAL CONNECTIONS

All wiring must be in compliance with NEC and local codes. All electrical connections are to be made in the wireway or mullion or LED light fixture.

IDENTIFICATION OF WIRING

Leads for all electrical circuits are identified by colored plastic bands. These bands correspond to the *color code sticker* (shown below) located inside the merchandiser's wireway cover. Anthony doors may not conform to this chart. Refer to the manufacturer's manual for their information.

SHIPPING DAMAGE

All equipment should be thoroughly examined for shipping damage before and during unloading. This equipment has been carefully inspected at our factory. Any claim for loss or damage must be made to the carrier. The carrier will provide any necessary inspection reports and/or claim forms.

Apparent Loss Or Damage

If there is an obvious loss or damage, it must be noted on the freight bill or express receipt and signed by the carrier's agent; otherwise, carrier may refuse claim.

Concealed Loss Or Damage

When loss or damage is not apparent until after equipment is uncrated, retain all packing materials and submit a written request to the carrier for inspection, within 15 days.

Missing Parts

Every effort is made to ship all parts for the kit. The Hussmann Service Center can be reached by calling

> • from U.S. & Canada 1-800-922-1919 • from Mexico 1-800-890-2900

WIRING COLOR CODE

Leads for all electrical circuits are identified by a colored plastic band: neutral wire for each circuit has either White insulation or a White plastic sleeve in addition to the color band.

> ELECTRICIAN NOTE: Use copper conductor wire only. CASE MUST BE GROUNDED

> > THESE ARE MARKER COLORS WIRES MAY VARY.

ALWAYS*CLEARTM GLASS

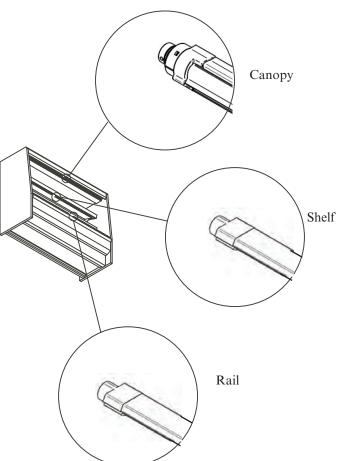
Hussmann recommends using a soft cloth with isopropyl (rubbing) alcohol to clean the inside (coated) glass surface. Isopropyl alcohol does not freeze and evaporates without leaving residue. Always allow the surface to dry before closing the door. Use of abrasives may damage the coated surface and void the warranty. Labels (stickers) applied to the coated surface will cause damage and void the warranty.

CLEANING LED FIXTURES

Use a lint-free cloth to wipe the surface of the luminaires. Do NOT use scouring pads, bleach, solvents, or detergents. This may damage the surface of the clear plastic cover.

LED LIGHT FIXTURES

LED (light emitting diode) lights work well for dimming or on/off operation using an occupancy sensor (optional kits). They can be turned on and off in a cold environment with no warm-up time and no negative impact on lamp life.



This instruction explains how to remove original equipment manufactured (OEM) fluorescent lamp fixtures and replace them

with Hussmann LED light fixtures for multi-

GENERAL

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FOR YOUR SAFETY

deck merchandiser.

• Read and observe all CAUTIONS and WARNINGS shown throughout these instructions.

• Each person working on or near the installation described must wear safety glasses or goggles.

• Block access to the work area by customers or other personnel to prevent injury.

• Read and follow all industry safety recommendations and established procedures.

• Wiring must be 2 wire with ground and rated for 75°C (176°F).

WIRING COLOR CODE

Leads for all electrical circuits are identified by a colored plastic band: neutral wire for each circuit has either White insulation or a White plastic sleeve in addition to the color band.

ORANGE OR TANLIGHTS MAROONRECEPTACLES YELLOWDEFROST HEATERS 120V REDDEFROST HEATERS 208V

GREEN*...... GROUND *EITHER COLORED SLEEVE OR COLORED INSULATION

ELECTRICIAN NOTE: Use copper conductor wire only. CASE MUST BE GROUNDED

THESE ARE MARKER COLORS WIRES MAY VARY.



SHIPPING DAMAGE

All equipment should be thoroughly examined for shipping damage before and during unloading.

This equipment has been carefully inspected at our factory. Any claim for loss or damage must be made to the carrier. The carrier will provide any necessary inspection reports and/or claim forms.

Apparent Loss Or Damage

If there is an obvious loss or damage, it must be noted on the freight bill or express receipt and signed by the carrier's agent; otherwise, carrier may refuse claim.

REMOVE EXISTING FLUORESCENT LIGHTING (IF PREVIOUSLY INSTALLED)

1. Remove product from the merchandiser and store at appropriate product temperature.

2. Turn the light switch to off. The switch is located inside the case on the door mullion.

3. Lock out and tag out the circuit breaker for the lighting circuit of the case where the LED light fixtures are being installed.

— LOCK OUT / TAG OUT — To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.

Concealed Loss Or Damage

When loss or damage is not apparent until after equipment is uncrated, retain all packing materials and submit a written request to the carrier for inspection, within 15 days.

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Every effort is made to ship all parts for the kit. The Hussmann Service Center can be reached by calling

- from U.S. & Canada 1-800-922-1919
 - from Mexico 01-800-890-2900 •

4. If fluorescent lighting is present in the canopy or shelves; it should be removed.

5. Remove and discard the lenses covering the fluorescent tubes.

6. Remove the fluorescent tubes.

Fluorescent Lamp Disposal: The United States Environmental Protection Agency has information regarding environmentally-safe fluorescent lamp waste management programs. Please visit the EPA website for more information.

EcoShine ULTRA Canopy LED Lighting for Multi-Deck Merchandisers Factory Replacement and Upgrade Parts

APPROVED SOURCE OF SUPPLY UNIVERSAL LIGHTING TECHNOLOGY							
LINE	PART NUMBER	REVISION	DESCRIPTION	LENGTH	LENGTH CCT POWER (W)		POSITION
Ι	3089718	В	LED-ES ULTRA CNPY 12IN 3000K	000K 11.22 3000K 5.2		5.2	CANOPY
2	3089719	В	LED-ES ULTRA CNPY 18IN 3000K	16.65	3000K	7.0	CANOPY
3	3089720	В	LED-ES ULTRA CNPY 24IN 3000K	20.66	3000K	8.7	CANOPY
4	3089721	В	LED-ES ULTRA CNPY 36IN 3000K	34.09	3000K	13.9	CANOPY
5	3089722	В	LED-ES ULTRA CNPY 48IN 3000K	45.66	3000K	17.4	CANOPY
6	3089723	В	LED-ES ULTRA CNPY 60IN 3000K	58.66	3000K	24.4	CANOPY
7	3089724	В	LED-ES ULTRA CNPY 12IN 3500K	11.22	3500K	5.2	CANOPY
8	3089725	В	LED-ES ULTRA CNPY 18IN 3500K	16.65	3500K	7.0	CANOPY
9	3089726	В	LED-ES ULTRA CNPY 24IN 3500K	20.66	3500K	8.7	CANOPY
10	3089727	В	LED-ES ULTRA CNPY 36IN 3500K	34.09	3500K	13.9	CANOPY
	3089728	В	LED-ES ULTRA CNPY 48IN 3500K	45.66	3500K	17.4	CANOPY
12	3089729	В	LED-ES ULTRA CNPY 60IN 3500K	58.66	3500K	24.4	CANOPY
13	3089730	В	LED-ES ULTRA CNPY 12IN 4000K	11.22	4000K	5.2	CANOPY
14	3089731	В	LED-ES ULTRA CNPY 18IN 4000K	16.65	4000K	7.0	CANOPY
15	3089732	В	LED-ES ULTRA CNPY 24IN 4000K	20.66	4000K	8.7	CANOPY
16	3089733	В	LED-ES ULTRA CNPY 36IN 4000K	34.09	4000K	13.9	CANOPY
17	3089734	В	LED-ES ULTRA CNPY 48IN 4000K	45.66	4000K	17.4	CANOPY
18	3089735	В	LED-ES ULTRA CNPY 60IN 4000K	58.66	4000K	24.4	CANOPY
19	3089736	В	LED-ES ULTRA CNPY 12IN 5000K	11.22	5000K	5.2	CANOPY
20	3089737	В	LED-ES ULTRA CNPY 18IN 5000K	16.65	5000K	7.0	CANOPY
21	3089738	В	LED-ES ULTRA CNPY 24IN 5000K	20.66	5000K	8.7	CANOPY
22	3089739	В	LED-ES ULTRA CNPY 36IN 5000K	34.09	5000K	13.9	CANOPY
23	3089740	В	LED-ES ULTRA CNPY 48IN 5000K	45.66	5000K	17.4	CANOPY
24	3089741	В	LED-ES ULTRA CNPY 60IN 5000K	58.66	5000K	24.4	CANOPY

Part Numbers are subject to change.

Contact your Hussmann Rep. for replacement parts.

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EcoShine ULTRA Horizontal LED Lighting

- Shelf and Rail for Multi-Deck
- Shelf, Rail and Canopy for Specialty and Service

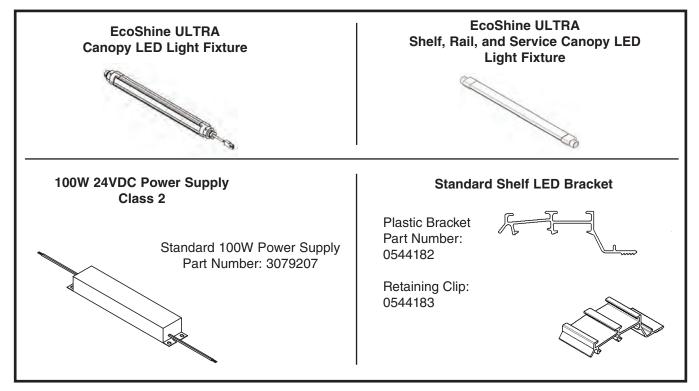
Part Numbers are subject to change. Contact your Hussmann Rep. for replacement parts.

Factory Replacement and Upgrade Parts

ITEM	PART NUMBER	REV	TITLE	LENGTH	(CCT) CORRELATED COLOR TEMP	POWER (W)	POSITION
I	3133172	С	LED-ES ULTRA SHLF 12IN 3000K	11.330 in	3000K	1.3	SHELF
2	3133173	С	LED-ES ULTRA SHLF 12IN 3500K	11.330 in	3500K	1.3	SHELF
3	3133174	С	LED-ES ULTRA SHLF 12IN 4000K	11.330 in	4000K	1.3	SHELF
4	3133175	С	LED-ES ULTRA SHLF 12IN 5000K	11.330 in	5000K	1.3	SHELF
5	3133176	С	LED-ES ULTRA SHLF 18IN 3000K	16.936 in	3000K	2.1	SHELF
6	3133177	С	LED-ES ULTRA SHLF 18IN 3500K	16.936 in	3500K	2.1	SHELF
7	3133178	С	LED-ES ULTRA SHLF 18IN 4000K	16.936 in	4000K	2.1	SHELF
8	3133179	С	LED-ES ULTRA SHLF 18IN 5000K	16.936 in	5000K	2.1	SHELF
9	3133180	С	LED-ES ULTRA SHLF 24IN 3000K	22.470 in	3000K	2.9	SHELF
10	3133181	С	LED-ES ULTRA SHLF 24IN 3500K	22.470 in	3500K	2.9	SHELF
П	3133182	С	LED-ES ULTRA SHLF 24IN 4000K	22.470 in	4000K	2.9	SHELF
12	3133183	С	LED-ES ULTRA SHLF 24IN 5000K	22.470 in	5000K	2.9	SHELF
13	3133184	С	LED-ES ULTRA SHLF 36IN 3000K	33.609 in	3000K	4.5	SHELF
14	3133185	С	LED-ES ULTRA SHLF 36IN 3500K	33.609 in	3500K	4.5	SHELF
15	3133186	С	LED-ES ULTRA SHLF 36IN 4000K	33.609 in	4000K	4.5	SHELF
16	3133187	С	LED-ES ULTRA SHLF 36IN 5000K	33.609 in	5000K	4.5	SHELF
17	3133188	С	LED-ES ULTRA SHLF 36IN 3000K HO	33.609 in	3000K	6.6	SHELF
18	3133189	С	LED-ES ULTRA SHLF 36IN 3500K HO	33.609 in	3500K	6.6	SHELF
19	3133190	С	LED-ES ULTRA SHLF 36IN 4000K HO	33.609 in	4000K	6.6	SHELF
20	3133191	С	LED-ES ULTRA SHLF 36IN 5000K HO	33.609 in	5000K	6.6	SHELF
21	3133192	С	LED-ES ULTRA SHLF 48IN 3000K	46.591 in	3000K	6.2	SHELF
22	3133193	С	LED-ES ULTRA SHLF 48IN 3500K	46.591 in	3500K	6.2	SHELF
23	3133194	С	LED-ES ULTRA SHLF 48IN 4000K	46.591 in	4000K	6.2	SHELF
24	3133195	С	LED-ES ULTRA SHLF 48IN 5000K	46.591 in	5000K	6.2	SHELF
25	3133196	С	LED-ES ULTRA SHLF 48IN 3000K HO	46.591 in	3000K	9	SHELF
26	3133197	С	LED-ES ULTRA SHLF 48IN 3500K HO	46.591 in	3500K	9	SHELF
27	3133198	С	LED-ES ULTRA SHLF 48IN 4000K HO	46.591 in	4000K	9	SHELF
28	3133318	С	LED-ES ULTRA SHLF 48IN 5000K HO	46.591 in	5000K	9	SHELF
29	3133319	С	LED-ES ULTRA SHLF 57IN 3000K	55.591 in	3000K	7.4	SHELF
30	3133320	С	LED-ES ULTRA SHLF 57IN 3500K	55.591 in	3500K	7.4	SHELF
31	3133321	С	LED-ES ULTRA SHLF 57IN 4000K	55.591 in	4000K	7.4	SHELF
32	3133322	С	LED-ES ULTRA SHLF 57IN 5000K	55.591 in	5000K	7.4	SHELF
33	3133323	С	LED-ES ULTRA SHLF 60IN 3000K	57.730 in	3000K	7.4	SHELF
34	3133324	С	LED-ES ULTRA SHLF 60IN 3500K	57.730 in	3500K	7.4	SHELF
35	3133325	С	LED-ES ULTRA SHLF 60IN 4000K	57.730 in	4000K	7.4	SHELF
36	3133326	С	LED-ES ULTRA SHLF 60IN 5000K	57.730 in	5000K	7.4	SHELF
37	3133327	С	LED-ES ULTRA SHLF 72IN 3000K	68.870 in	3000K	9	SHELF
38	3133329	С	LED-ES ULTRA SHLF 72IN 3500K	68.870 in	3500K	9	SHELF
39	3133330	С	LED-ES ULTRA SHLF 72IN 4000K	68.870 in	4000K	9	SHELF
40	3133331	С	LED-ES ULTRA SHLF 72IN 5000K	68.870 in	5000K	9	SHELF
41	3133332	С	LED-ES ULTRA SHLF 75IN 3000K	73.591 in	3000K	9.8	SHELF
42	3133333	С	LED-ES ULTRA SHLF 75IN 3500K	73.591 in	3500K	9.8	SHELF
43	3133334	С	LED-ES ULTRA SHLF 75IN 4000K	73.591 in	4000K	9.8	SHELF
44	3133335	С	LED-ES ULTRA SHLF 75IN 5000K	73.591 in	5000K	9.8	SHELF



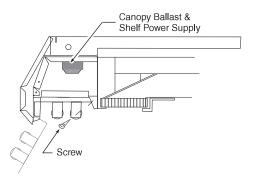








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Remove Front Lamp Assembly to Access Screws

Fluorescent Equipment Removal

- 1. **DISCONNECT POWER TO THE** MERCHANDISER.
- 2. LED power supplies are installed in the same location as existing canopy and shelf ballasts. These ballasts are located at the top of the merchandiser inside the canopy.
- 3. Remove the screws that secure the lamp panel.

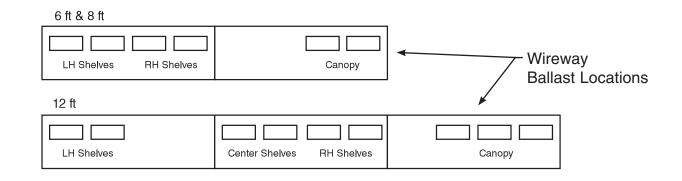


Access to Canopy and Shelf Ballasts

- 4. Grasp the lamp panel at its front edge and carefully pull down. It will swing freely from its hinged rear edge.
- 5. Disconnect wires from shelf and canopy ballasts. Note the color of power source wires.

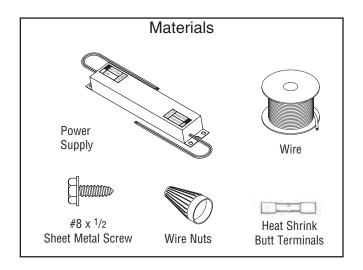


 Locate and remove the ballasts. Mount the LED power supplies in the canopy. Power supply has a 120V 50/60 Hz input and a 24VDC output.



CONNECT WIRING TO POWER SUPPLY

- Tuck the wire leads from the LED fixture, into the canopy, and connect the leads to the power supply. Follow the wiring diagrams on the last two pages as a guide. Connect the original load and neutral wires to LED power supply input wires (black and white wires), and secure with approved wiring connectors.
- 2. Connect the LED power supply output wires (red and blue wires) to wiring leads.
- 3. Additional wiring may be needed to connect the power supply to existing wiring in the wireway. Use conductors of proper size and rating.



4. The power supply case is grounded. Attach power supply to a ground point in the refrigerated merchandiser, either directly with a screw, or by using a green wire to attach to a remote ground point

DO NOT LEAVE ANY EXPOSED WIRE NUTS OR CONNECTORS. RETROFIT LED FIXTURES HAVE LONG WIRING LEADS (2M). FISH NEW WIRING THROUGH MULLION USING EXISTING BALLAST WIRING.

IMPORTANT

Ensure that all connection points are sealed for damp location using the appropriate method per the NEC or local electrical code.

WARNING

- LOCK OUT / TAG OUT -To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as doors, lights, fans, heaters, and thermostats.



SHELF LIGHT INSTALLATION

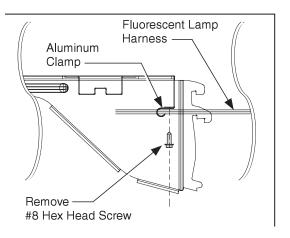
- 1. Remove all existing shelf lights and mounting clips.
- 2. Use the magnetic clips or shelf clips to affix the light bar to the underside of the shelf.

NOTE:

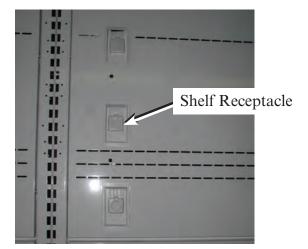
One power supply can provide power for as many as 10 shelf lights.

Rail lights are installed similar.

- 3. Plug the quick-connect plugs into the shelf receptacles at the back of the merchandiser.
- 4. Use a tie wrap to contain any excess plug wire. Do not allow wire to lie on product or hang loose.



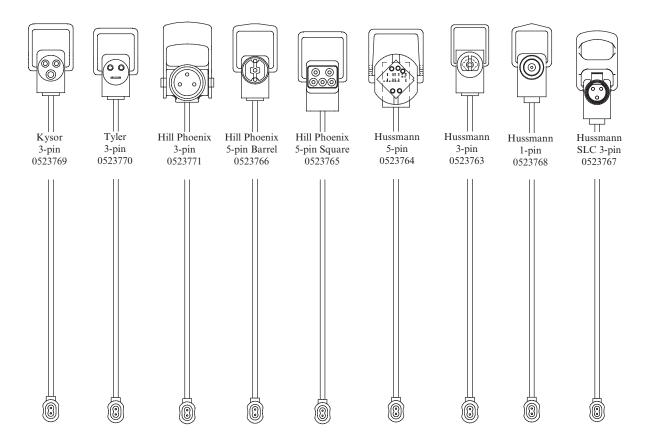
NOTE: Free cord length from last clip (strain relief) to outlet must be less than 12 inches (305 mm). Longer lengths must be constrained. Inspect all shelf lamp plugs and receptacles for arcing, corrosion or other damage. Replace as necessary.



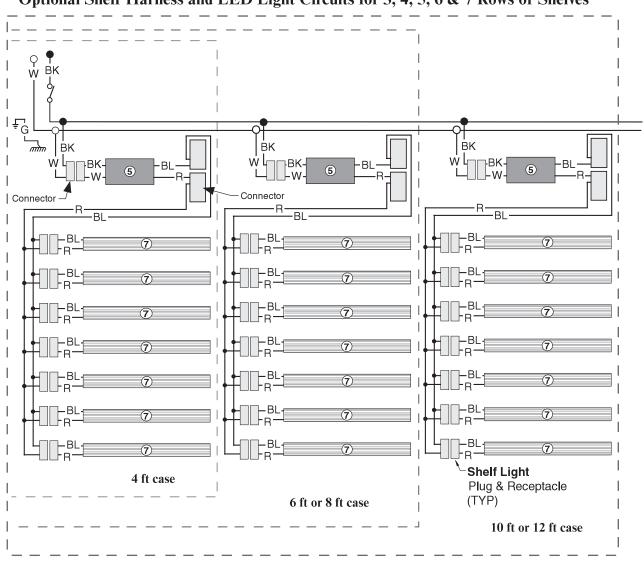


Common Shelf Plugs

Contact your Hussmann representative to order other custom plug types.







Optional Shelf Harness and LED Light Circuits for 3, 4, 5, 6 & 7 Rows of Shelves

WARNING

All components must have mechanical ground, and the merchandiser must be grounded.

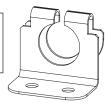
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

R = Red	G = Green	BL = Blue	BK = Black	W = White
• = $120V$ Power	○ = 120V NEUTI	RAL $\frac{1}{2} = 1$	Field Ground	mm = CASE GROUND

CANOPY LIGHT INSTALLATION

- 1. Turn off power. Remove existing EcoShine II canopy lights (if applicable).
- 2. Route electrical wiring connections for the single-row canopy. Connection can be made at the power supply using a molex connector, or use approved wire connectors or heat shrink butt connectors.
- 3. Attach the Canopy LEDs to the canopy using mounting clips and screws.

Standard Clip — 0525165 Intermediate — 0525166 Extended — 0525174

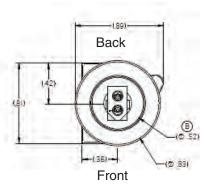


EcoShine II and EcoShine ULTRA Canopy Standard Mounting Clip (Canopy for multi-deck) NOTE:

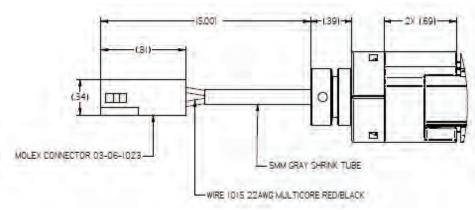
One power supply can provide power for as many as 3 canopy lights.

4. Restore power to the merchandiser. Verify proper orientation of all canopy light bars.



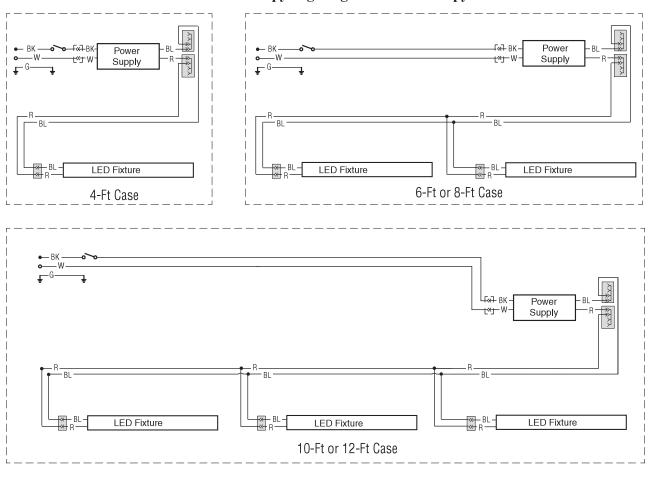


EcoShine ULTRA Multi-Deck Canopy End View



EcoShine ULTRA Multi-Deck Canopy Side View





Standard LED Canopy Lighting — 1 Row Canopy

WARNING

All components must have mechanical ground, and the merchandiser must be grounded. CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

R = Red Y = Yellow G = Green BL = Blue BK = Black W = White

• = 120V Power \bigcirc = 120V Neutral $\frac{1}{2}$ = Field Ground \overrightarrow{mm} = Case Ground

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To obtain warranty information or other support, contact your Hussmann representative.

Please include the model and serial number of the product.

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