

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
<b>FAN ASSEMBLIES AND THERMOSTATS</b>				<b>LAMPS AND BALLASTS</b>			
<b>8 Ft, 10 Ft, 12 Ft &amp; 14 Ft</b>				C.	0459491	Ballast, Electronic Canopy (BA.4481566)	(3)
A.	<b>12W Standard</b>	Fan Assembly	(1)	D.	Ballast, Electronic 0466235	Shelf 3 lamps (BA.4480901)	(4)
	0047000	Fan Motor, Evaporator (MO.4410103)		E.	Fluorescent Lamp	Replace with like fixtures	(5)
	0142780	Fan Blade (FB.0142780) embossing toward motor					
	<b>12W Energy Efficient</b>	Fan Assembly	(1)				
	0477655	Fan Motor, Evaporator (MO.4410546)					
	0142780	Fan Blade (FB.0142780) embossing toward motor					
B.	Optional Adjustable Refrigeration Thermostat		(2)				
	0448347	(CT.4481631)					

Note: Revision C adds energy efficient fan Btu note on page 3.



# Engineering Plan Views

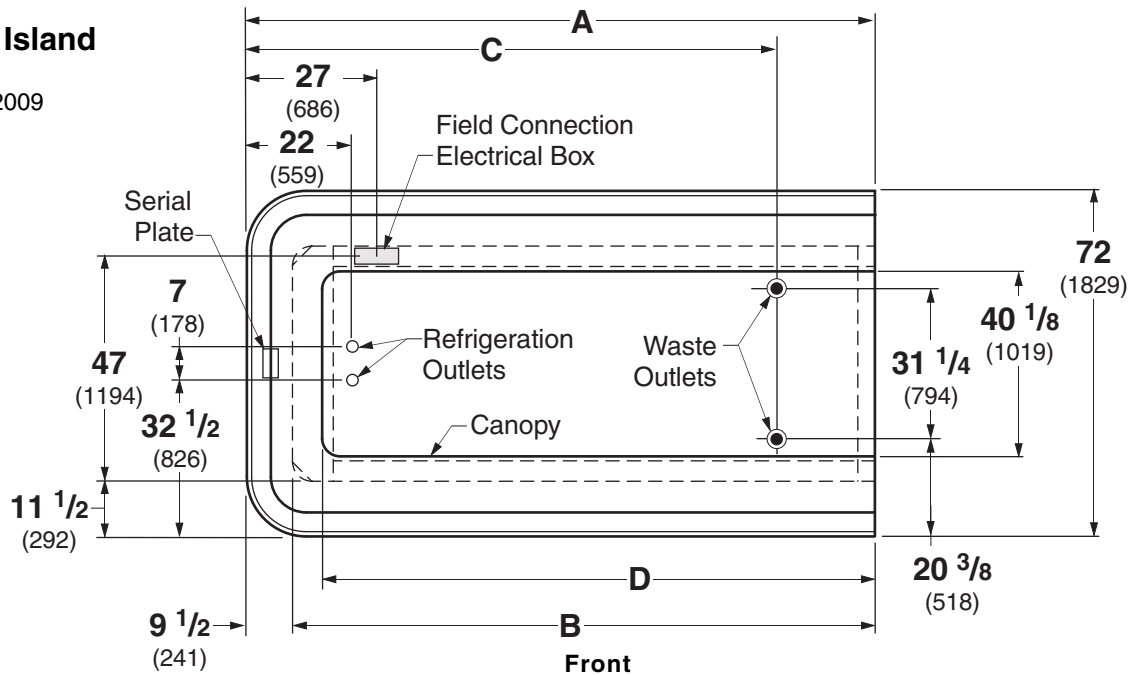
## PHYSICAL DATA

Merchandiser Drip Pipe (in.)	1 1/2
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	5/8

Dimensions shown as inches and (mm).

### RI4E Island

08-2009

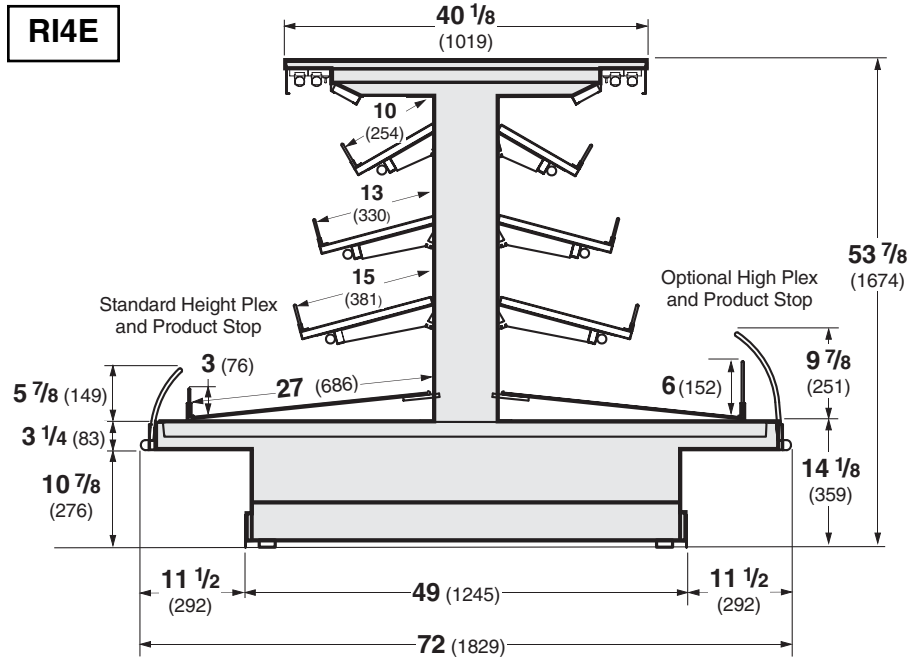


	8 ft	10 ft	12 ft	14 ft
<b>General</b>				
<b>(A)</b> Overall Case Length	96 (2438)	120 (3048)	144 (3658)	168 (4267)
<b>(B)</b> Base Length	86 1/2 (2197)	110 1/2 (2807)	134 1/2 (3416)	158 1/2 (4051)
Maximum O/S dimension of case back to front ( <i>includes bumper</i> )	72 (1829)	72 (1829)	72 (1829)	72 (1829)
Front of splashguard to O/S edge of front base rail	1 5/8 (41)	1 5/8 (41)	1 5/8 (41)	1 5/8 (41)
Front of case to O/S edge of front base rail	13 1/8 (333)	13 1/8 (333)	13 1/8 (333)	13 1/8 (333)
Back of case to O/S edge of front base rail	58 7/8 (1495)	58 7/8 (1495)	58 7/8 (1495)	58 7/8 (1495)
Width of base rail	1 7/8 (48)	1 7/8 (48)	1 7/8 (48)	1 7/8 (48)
<b>(D)</b> Length of Canopy	80 1/4 (2038)	104 1/4 (2648)	128 1/4 (3258)	152 1/4 (3867)
Width of Canopy	40 1/8 (1019)	40 1/8 (1019)	40 1/8 (1019)	40 1/8 (1019)
<b>Electrical Service</b> ( <i>Electrical Field Wiring connection point</i> )				
Center of Electrical service to O/S edge of front base rail	47 (1194)	47 (1194)	47 (1194)	47 (1194)
Left end of case to center of field connection box	27 (686)	27 (686)	27 (686)	27 (686)
Right end of case to center of field connection box	69 (1753)	93 (2362)	117 (2972)	141 (3581)
<b>Waste Outlets</b>				
<b>(C)</b> LH End of case to the center of waste outlet	81 (2057)	96 (2438)	96 7/8 (2461)	93 7/8 (2384)
Center of front waste outlet to outside of front base rail	8 7/8 (225)	8 7/8 (225)	8 7/8 (225)	8 7/8 (225)
Center of back waste outlet to outside of front base rail	40 1/8 (1019)	40 1/8 (1019)	40 1/8 (1019)	40 1/8 (1019)
Schedule 40 PVC drip pipe	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)	1 1/2 (38)
<b>Refrigeration Outlet</b>				
LH end of case to center of refrigeration outlet	22 (559)	22 (559)	22 (559)	22 (559)
RH end of case to center of refrigeration outlet	74 (1880)	98 (2489)	122 (3099)	146 (3708)

Multi-deck Island End, 4 Display Levels

**RI4E**  
Delicatessen

Dimensions shown as inches and (mm).



**REFRIGERATION DATA**

**Note:** This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H.

	<b>RI4E</b>
<b>Discharge Air (°F)</b>	27
<b>Evaporator (°F)</b>	20
<b>Unit Sizing (°F)</b>	18
<b>Btu/hr/ft<sup>‡</sup></b>	
<b>LIT &amp; UNLIT SHELVES</b>	<b>RI4E</b>
<b>Parallel</b>	2292
<b>Conventional</b>	2500

<sup>‡</sup>Optional energy efficient motors reduce the refrigeration load by 109 Btu/hr/ft.

**DEFROST DATA**

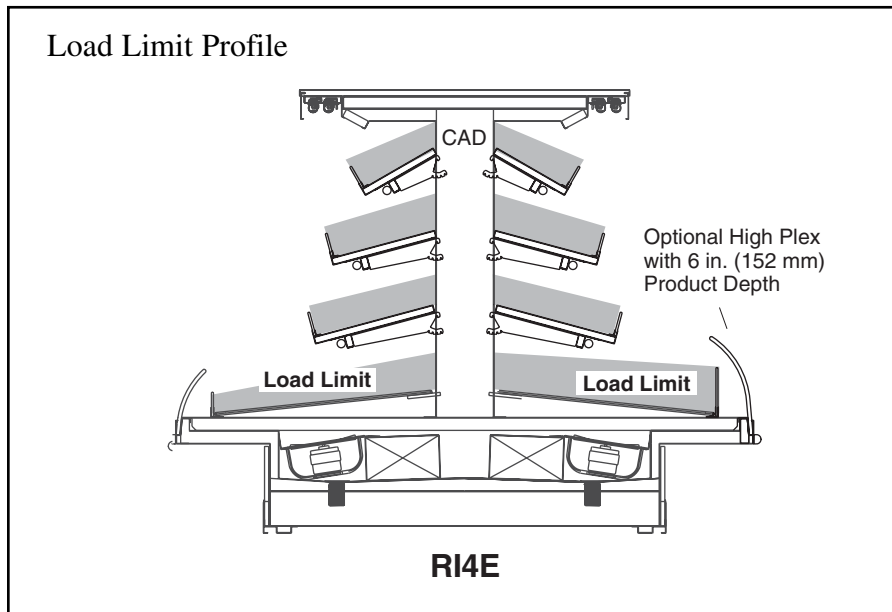
	<b>RI4E</b>
<b>Frequency (hr)</b>	4
<b>Defrost Water (lb/ft/day)</b>	12
<i>(± 15% based on case configuration and product loading).</i>	

**NSF® Certification**

This merchandiser is manufactured to meet ANSI/NSF® (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

<b>OFFTIME</b>	<b>RI4E</b>
<b>Time Terminated (minutes)</b>	20

**ELECTRIC OR GAS** Not Recommended



**CONVENTIONAL CONTROLS**

<b>Low Pressure Backup Control</b>	
	<b>RI4E</b>
<b>CI/CO*</b>	14°F / 4°F
<b>Indoor Unit Only, Pressure Defrost Termination*</b>	
	48°F

\*Use a Temperature Pressure Chart to determine PSIG conversions.

<b>Estimated Charge **</b>		<b>RI4E</b>
<b>8 ft</b>	1.8 lb 29 oz	0.8 kg
<b>10 ft</b>	2.2 lb 35 oz	1.0 kg
<b>12 ft</b>	2.6 lb 42 oz	1.2 kg
<b>14 ft</b>	3.2 lb 51 oz	1.5 kg

\*\*This is an average for all refrigerant types. Actual refrigerant charge may vary by approximately half a pound.

**Cases may not function properly if they are loaded above load limits.**

Air flow between the shelves, from the Center Air Discharge (CAD) to the return, must be maintained at all times for optimum operating efficiency and to prolong product shelf life. At no time should merchandisers be stocked beyond the load limits indicated.

# RI4E

Delicatessen

## Electrical Data

	8 ft	10 ft	12 ft	14 ft					
<b>Number of Fans – 12W</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>					
	<b>Amperes</b>					<b>Watts</b>			
	<b>8 ft</b>	<b>10 ft</b>	<b>12 ft</b>	<b>14 ft</b>	<b>8 ft</b>	<b>10 ft</b>	<b>12 ft</b>	<b>14 ft</b>	
<b>Evaporator Fan</b>									
120V 60Hz Standard	5.20	6.50	7.80	9.10	400	500	600	700	
120V 50Hz Standard	6.00	7.50	9.00	10.50	456	570	684	798	
230V 60Hz Export	NA	NA	NA	NA	NA	NA	NA	NA	
230V 50Hz Export	NA	NA	NA	NA	NA	NA	NA	NA	
120V 60Hz Energy Efficient	2.40	3.00	3.60	4.20	144	180	216	252	
230V 60Hz Energy Efficient	NA	NA	NA	NA	NA	NA	NA	NA	
<b>Minimum Circuit Ampacity (MCA)</b>									
120V 60Hz Standard	5.40	6.70	8.00	9.30					
120V 50Hz Standard	6.20	7.70	9.20	10.70					
230V 60Hz Export	NA	NA	NA	NA					
230V 50Hz Export	NA	NA	NA	NA					
120V 60Hz Energy Efficient	2.60	3.20	3.80	4.40					
230V 60Hz Energy Efficient	NA	NA	NA	NA					
<b>Maximum Over Current Protection 120V</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>20</b>					
<b>Maximum Over Current Protection 230V</b>	NA	NA	NA	NA					
<b>Standard Lighting</b>									
2 Rows of Canopy	1.75	2.22	2.68	3.15	210	266	322	378	
<b>Optional Lighting</b>									
1 Row of Ledge	1.33	1.67	2.00	2.33	160	200	240	280	
<b>Shelf Lighting</b>									
1 Row of Shelves	0.94	1.08	1.48	1.78	113	129	177	21	
2 Rows of Shelves	1.89	2.15	2.95	3.55	226	258	354	426	
3 Rows of Shelves	2.83	3.23	4.43	5.33	339	387	531	639	

115V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

**Product Data**

**RI4E8**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	53.26 ft <sup>3</sup> /case (1.51 m <sup>3</sup> /case)
<i>ARHI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	45.34 ft <sup>2</sup> /case (4.21 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	86.64 ft <sup>2</sup> /case (8.05 m <sup>2</sup> /case)

**RI4E10**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	66.58 ft <sup>3</sup> /case (1.89 m <sup>3</sup> /case)
<i>ARHI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	56.67 ft <sup>2</sup> /case (5.26 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	108.30 ft <sup>2</sup> /case (10.06 m <sup>2</sup> /case)

**RI4E12**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	79.90 ft <sup>3</sup> /case (2.26 m <sup>3</sup> /case)
<i>ARHI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	68.00 ft <sup>2</sup> /case (6.32 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	129.96 ft <sup>2</sup> /case (12.07 m <sup>2</sup> /case)

**RI4E14**

<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Case)	93.21 ft <sup>3</sup> /case (2.64 m <sup>3</sup> /case)
<i>ARHI Total Display Area</i> <sup>2</sup> (Sq Ft/Case)	79.34 ft <sup>2</sup> /case (7.37 m <sup>2</sup> /case)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Case)	151.62 ft <sup>2</sup> /case (14.09 m <sup>2</sup> /case)

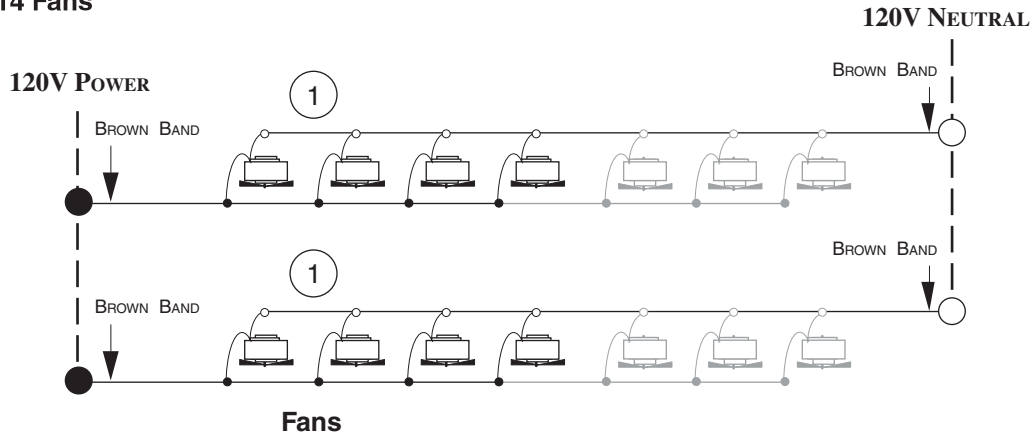
- <sup>1</sup> ARHI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume / Unit of Length, ft<sup>3</sup>/ft [m<sup>3</sup>/m]  
<sup>2</sup> Computed using ARHI 1200 standard methodology: Total Display Area, ft<sup>2</sup> [m<sup>2</sup>] / Unit of Length, ft [m]  
<sup>3</sup> Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann **Product Reference Guide**. The standard shelf complement for this model is (1) row of 10-inch shelf, (1) row of 13-inch shelf and (1) row of 15-inch shelf.

<b>ESTIMATED SHIPPING WEIGHT <sup>4</sup></b>					
<b>Case</b>	<b>8 ft</b>	<b>10 ft</b>	<b>12 ft</b>	<b>14 ft</b>	<b>End</b>
<b>lb (kg)</b>	1400 (635)	1500 (680)	1700 (771)	1900 (862)	NA
<sup>4</sup> Actual weights will vary according to optional kits included.					

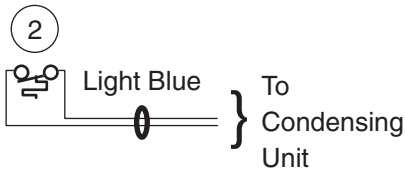
# Fan Wiring Offtime Defrost

## 8, 10, 12 & 14 Fans

- 8 ft — 8 Fans
- 10 ft — 10 Fans
- 12 ft — 12 Fans
- 14 ft — 14 Fans



## Refrigeration Thermostat



### WARNING

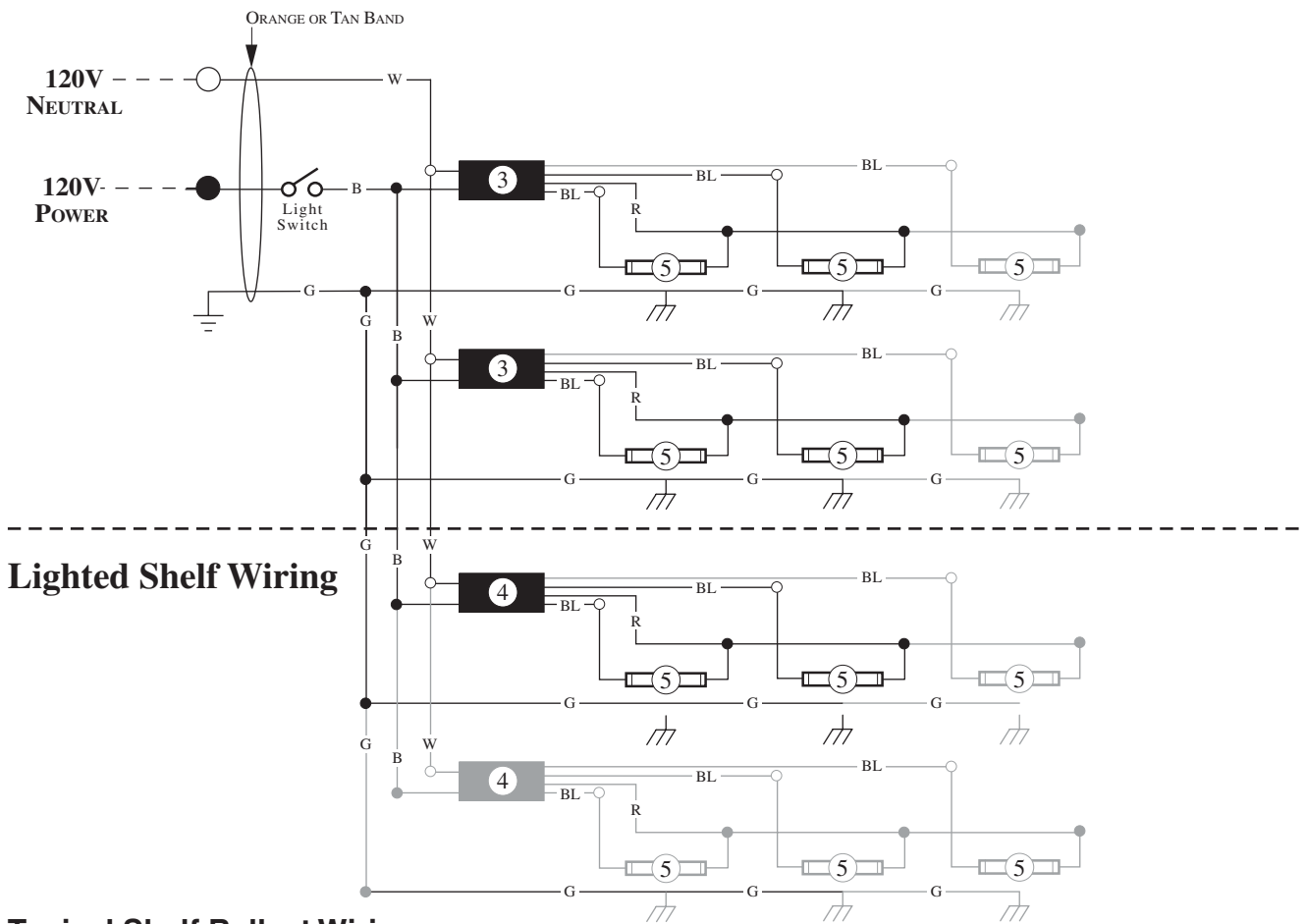
All components must have mechanical ground, and the merchandiser must be grounded.

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

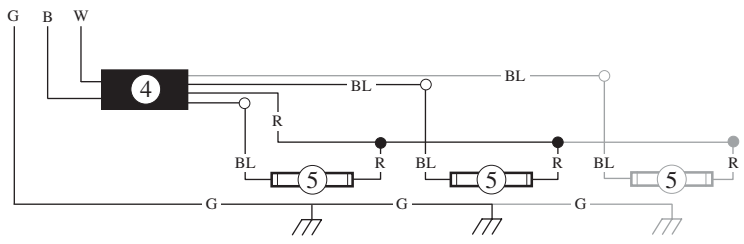
● = 120V POWER    ○ = 120V NEUTRAL    ⊥ = FIELD GROUND    ≡ = CASE GROUND

# Standard Lighting — 1 Row Canopy



**Typical Shelf Ballast Wiring**  
 Maximum lamps per ballast is three (3).  
 Different shelf configurations and different case lengths will have more shelf ballasts.

### Optional Ledge Light Circuit



### WARNING

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● = 120V POWER   ○ = 120V NEUTRAL   ⊥ = FIELD GROUND   ≡ = CASE GROUND