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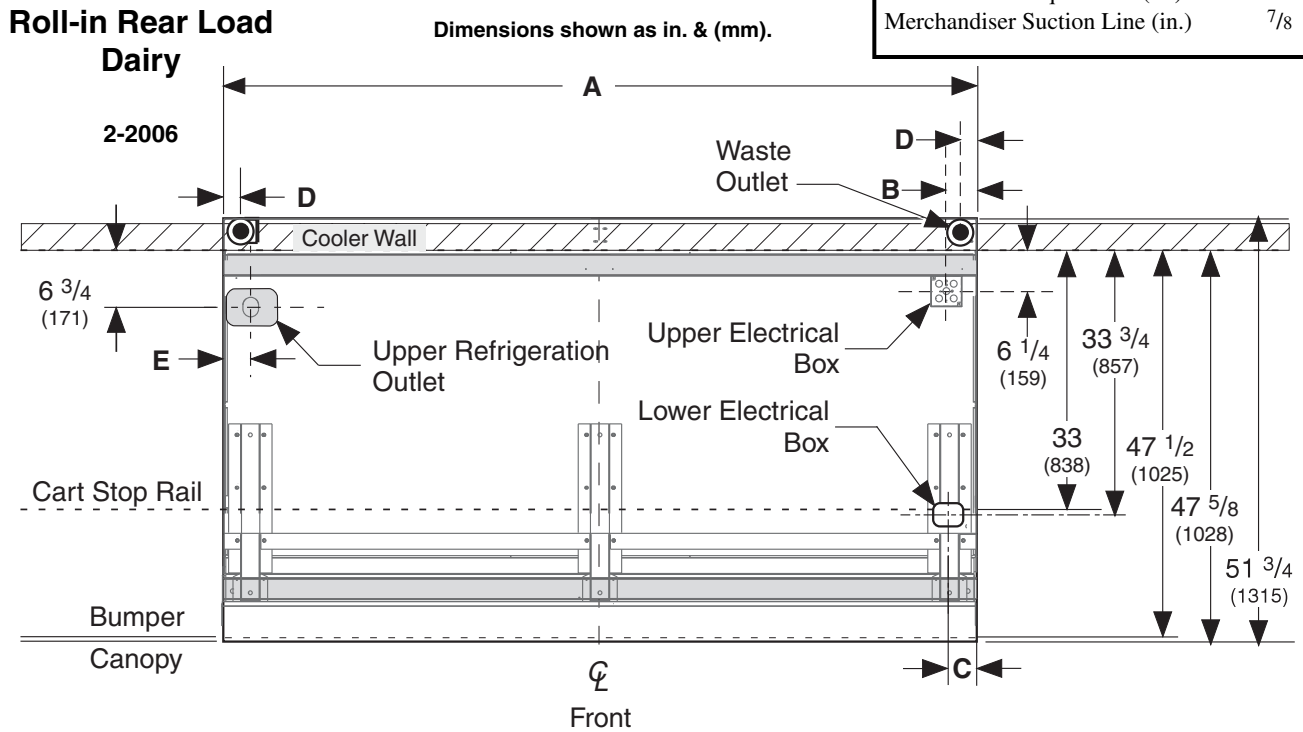
Item	Part #	Description	Wiring Item #	Item	Part #	Description	Wiring Item #
<b>FAN ASSEMBLIES</b>				<b>LAMPS AND BALLASTS</b>			
A.	<b>13W</b> Standard Fan Assembly — Discharge	(1)	D.	Ballast, Electronic	(4)		
	0378349	Fan Motor, Discharge (MO.4410104)		0480130	2 lamps (BA.4481676)		
	0463643	Fan Blade (FB.4780648)		0480131	3 lamps (BA.4481654)		
	<b>13W</b> Energy Efficient Fan Assembly — Discharge			0480132	4 lamps (BA.4481677)		
	0477656	Fan Motor, Discharge (MO.4410547)	E.	Fluorescent Lamp	(5)		
	0463643	Fan Blade (FB.4780648)		<i>Replace with like fixtures</i>			
B.	<b>12W</b> Standard Fan Assembly — Return	(2)	<b>LED FIXTURES AND POWER SUPPLY</b>				
	0047000	Fan Motor, Return (MO.4410103)	F.	0501213	Power Supply (EP.4481861)	(6)	
	0315470	Fan Blade (FB.0315470)	G.	EcoShine LED Canopy Fixture	(7)		
	<b>12W</b> Energy Efficient Fan Assembly — Return		4441720	Front 48-inch	<b>2900K</b> HCRI		
	0477655	Fan Motor, Return (MO.4410546)	4441722	Front 48-inch	<b>3500K</b> HCRI		
	0315470	Fan Blade (FB.0315470)	4441724	Front 48-inch	<b>3500K</b>		
			4441726	Front 48-inch	<b>4100K</b>		
			4441721	Rear 48-inch	<b>2900K</b> HCRI		
			4441723	Rear 48-inch	<b>3500K</b> HCRI		
			4441725	Rear 48-inch	<b>3500K</b>		
			4441727	Rear 48-inch	<b>4100K</b>		
<b>THERMOSTATS</b>							
C.	Optional Adjustable Refrigeration Thermostat	(3)					



# Engineering Plan Views

NOTE: When joining D5X models with D5XRRRI or D5XRRIS models, the drain location for the D5X must be moved forward 2.325 inches (59 mm) to allow fronts to align.

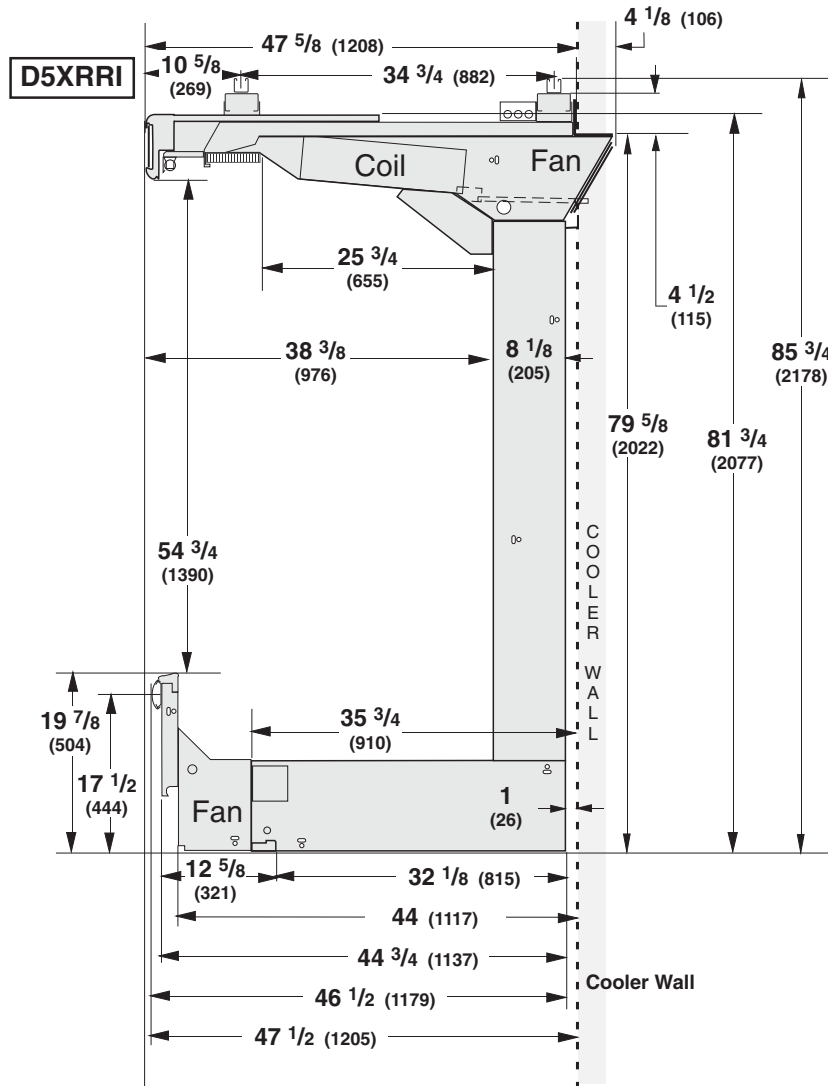
PHYSICAL DATA	
Merchandiser Drip Pipe (in.)	7/8
Merchandiser Liquid Line (in.)	3/8
Merchandiser Suction Line (in.)	7/8



	8 ft	12 ft
<b>General</b>		
<b>(A)</b> Case Length*	96 3/8 (2448)	144 1/2 (3670)
Maximum O/S dimension of case back to front (Front of canopy through cooler wall)	53 1/8 (1349)	53 1/8 (1349)
Back of case (cooler wall) to O/S edge of front canopy	47 5/8 (1208)	47 5/8 (1208)
Back of case (cooler wall) to O/S edge of front bumper	47 1/2 (1205)	47 1/2 (1205)
Back of case (cooler wall) to front of splashguard	44 (1117)	44 (1117)
* Each End and Insulated Partition adds 1 1/2 in. (38 mm) to the length of the lineup.		
<b>Electrical Service</b> ** Electrical Field Wiring Connection Point		
Back of case (cooler wall) to center of 4x4x2 Electrical box	6 1/4 (159)	6 1/4 (159)
<b>(B)</b> RH End of case to center of 4x4x2 Upper Electrical box	2 1/2 (64)	2 1/2 (64)
Back of case (cooler wall) to center of Lower Electrical box	33 3/4 (857)	33 3/4 (857)
<b>(C)</b> RH End of case to center of Lower Electrical box	3 1/8 (79)	3 1/8 (79)
<b>Waste Outlet</b> ○		
<b>(D)</b> End of case to the center of waste outlet (canopy drip pipe)	1 1/4 (32)	1 1/4 (32)
Outside diameter of the drip pipe	7/8 (22)	7/8 (22)
<b>Refrigeration Outlet</b> □		
Back of case (cooler wall) to center of refrigeration outlet	6 3/4 (171)	6 3/4 (171)
<b>(E)</b> LH end of case to center of refrigeration outlet	3 1/2 (89)	3 1/2 (89)
Outside diameter of the liquid line	3/8 (10)	3/8 (10)
Outside diameter of the suction line	7/8 (22)	7/8 (22)

**Impact *Excel* D5XRRI**  
Dairy

Dimensions shown as in. & (mm).



**REFRIGERATION DATA**

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

	D5XRRI
Discharge Air (°F)	32
Evaporator (°F)	21
Unit Sizing (°F)	19

**Important Note:** Btu numbers are for the D5XRRI when installed to a cooler operating at a 36°F air temperature. The unit cooler coil must be sized for an **additional load of 800 Btu/hr/ft of D5XRRI case** installed to the cooler.

Btu/hr/ft <sup>‡</sup>	Roll-in Dairy Carts	
	Parallel	Conventional
D5XRRI	1035	1200
UNLIT	1035	1200

<sup>‡</sup>Optional energy efficient motors reduce the refrigeration load by 70 Btu/hr/ft.

**DEFROST DATA**

	D5XRRI
Frequency (hr)	6
Defrost Water (lb/ft/day)	6

(± 15% based on case configuration and product loading).

OFF TIME	D5XRRI
Time Terminated (minutes)	50
ELECTRIC OR GAS	Not Recommended

Standard Defrost Thermostat — NA

**CONVENTIONAL CONTROLS**

Low Pressure Backup Control	D5XRRI
CI/CO (Temp °F)*	14/4
Indoor Unit Only, Pressure Defrost Termination (Temp °F)*	NA

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

Estimated Charge **	D5XRRI		
8 ft	2.7 lb	43 oz	1.2 kg
12 ft	3.9 lb	62 oz	1.8 kg

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

**NSF Certification**

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

# Impact *Excel* D5XRRI Dairy

## Electrical Data

Number of Fans			8 ft	12 ft		
Discharge — 13W			4	6		
Return — 12W			4	6		
			Amperes		Watts	
			8 ft	12 ft	8 ft	12 ft
Discharge Fan						
120V	60Hz	Standard	3.08	4.62	244	366
120V	50Hz	Standard	3.92	5.88	280	420
230V	60Hz	Export	1.56	2.34	244	366
230V	50Hz	Export	1.92	2.88	280	420
120V	60Hz	Energy Efficient	1.20	1.80	80	120
230V	60Hz	Energy Efficient	0.60	0.90	80	120
Return Fan						
120V	60Hz	Standard	2.60	3.90	200	300
120V	50Hz	Standard	3.00	4.50	228	342
230V	60Hz	Export	1.32	1.98	200	300
230V	50Hz	Export	1.52	2.28	228	342
120V	60Hz	Energy Efficient	1.20	1.80	72	108
230V	60Hz	Energy Efficient	0.60	0.90	72	108
Minimum Circuit Ampacity						
120V	60Hz	Standard	5.88	8.72		
120V	50Hz	Standard	7.12	10.58		
230V	60Hz	Export	3.08	4.52		
230V	50Hz	Export	3.64	5.36		
120V	60Hz	Energy Efficient	2.60	3.80		
230V	60Hz	Energy Efficient	1.40	2.00		
Maximum Over Current Protection 120V			20	20		
Maximum Over Current Protection 230V			15	15		
Standard Lighting (T-8 fluorescent)						
1 Row Canopy			0.51	0.77	59	85
Optional Lighting (T-8 fluorescent)						
Additional 1 Row Canopy			0.51	0.77	59	85
Additional 2 Row Canopy			1.02	1.54	118	170
Additional 3 Row Canopy			1.53	2.31	177	255
1 Row Rail Light			0.51	0.77	59	85
EcoShine Multi-deck — Normal CRI—120VAC, 50/60Hz						
2 Row Canopy (Front & Rear)			0.55	0.82	66	98
EcoShine Multi-deck — High CRI —120VAC, 50/60Hz						
2 Row Canopy (Front & Rear)			0.63	0.93	75	112
Always*Bright Multi-deck —120VAC, 50/60Hz						
2 Row Canopy (Front & Rear)			0.71	1.08	85	130

120V Lighting Circuit Total = Standard Lighting + Total Optional Lighting + Optional Shelf Lighting

230V Lighting Circuit Total = Multiply 120V Lighting Circuit Total by 0.52

**Product Data**

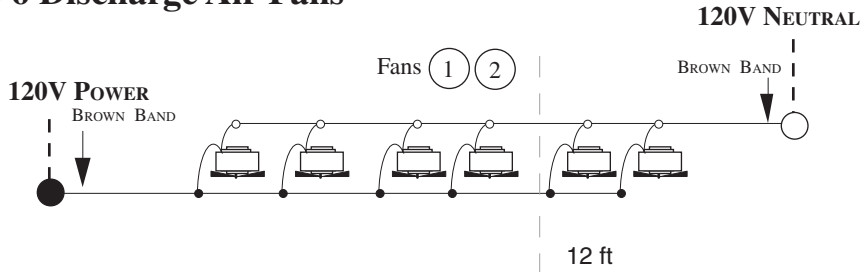
<i>Recommended Usable Cube</i> <sup>1</sup> (Cu Ft/Ft)	10.89 ft <sup>3</sup> /ft (1.01 m <sup>3</sup> /m)
<i>Total Display Area</i> <sup>2</sup> (Sq Ft/Ft)	4.79 ft <sup>2</sup> /ft (1.46 m <sup>2</sup> /m)
<i>Shelf Area</i> <sup>3</sup> (Sq Ft/Ft)	2.15 ft <sup>2</sup> /ft (0.66 m <sup>2</sup> /m)

- <sup>1</sup> 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> 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 NONE.

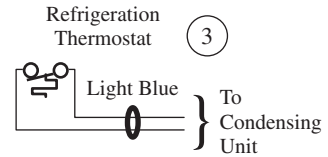
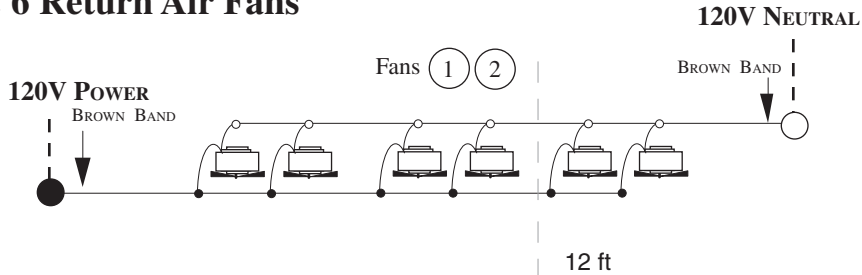
<b>ESTIMATED SHIPPING WEIGHT <sup>4</sup></b>			
<b>Case</b>	<b>8 ft</b>		<b>Solid End</b>
	<b>12 ft</b>		<b>(each)</b>
<b>lb (kg)</b>	1000 (454)	1400 (635)	130 (59)
<sup>4</sup> Actual weights will vary according to optional kits included.			

# Fan Wiring Offtime Defrost

## 4 & 6 Discharge Air Fans



## 4 & 6 Return Air Fans



### WARNING

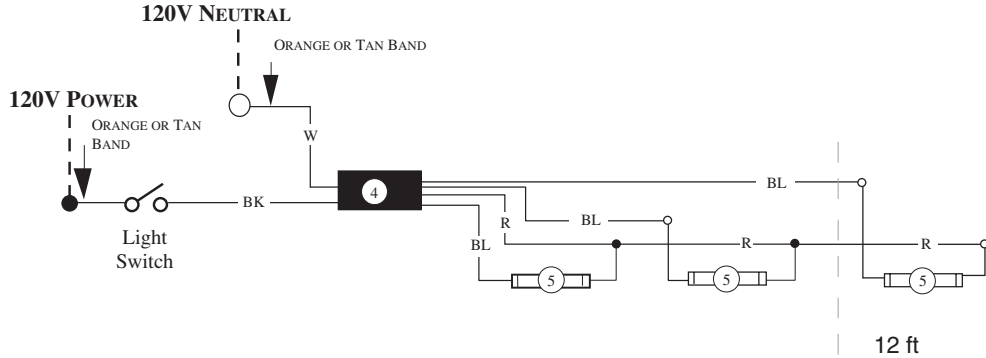
All components must have mechanical ground, and the merchandiser must be grounded.  
Circled Numbers = Parts List Item Numbers

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

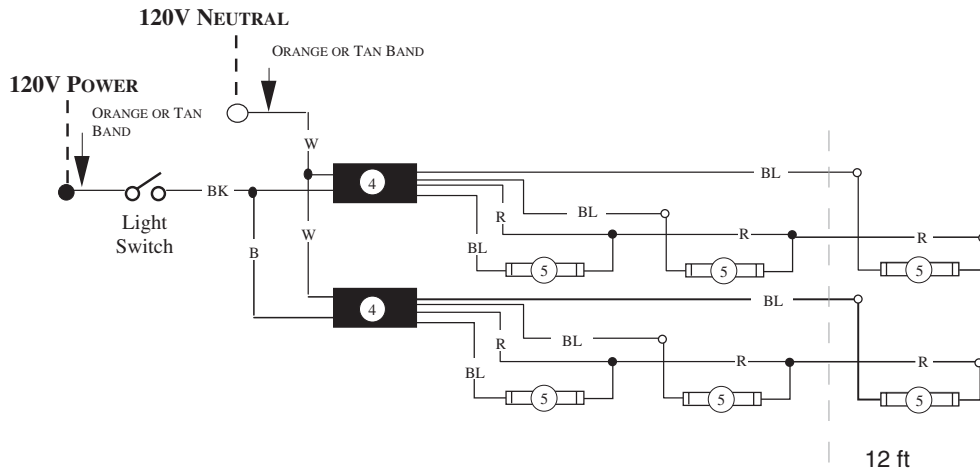
● = 120V POWER ○ = 120V NEUTRAL ≡ = Field GROUND ≡ = Case GROUND

# Optional Shelf Lighting Fluorescent Fixtures

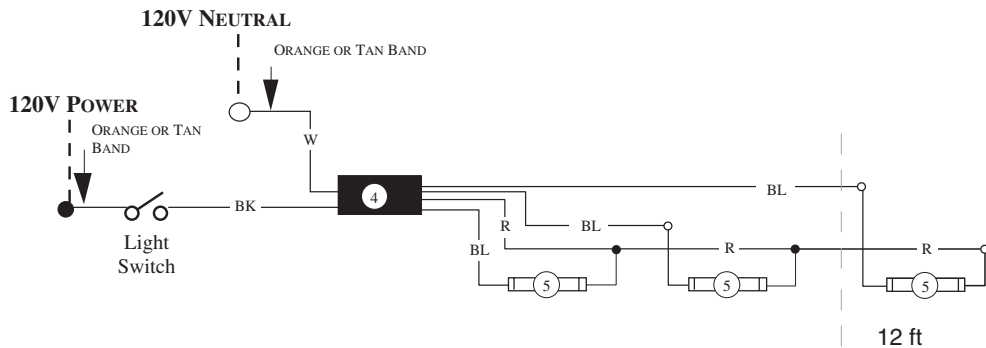
## Standard Lighting: 1 Row Canopy



## Optional Lighting: 2 Rows Canopy



## Optional Lighting: 1 Row Rail



### WARNING

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

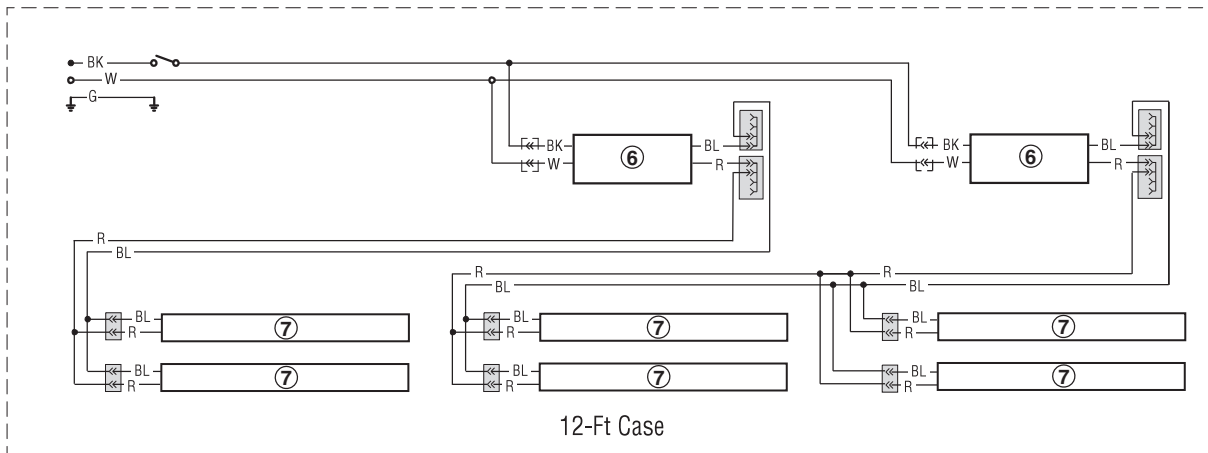
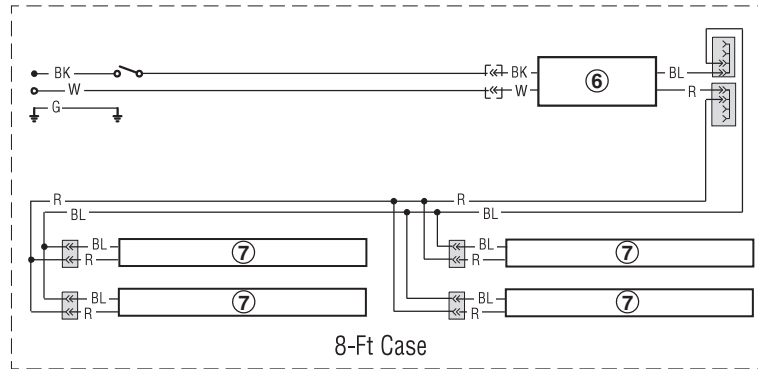
CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS

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

● = 120V POWER ○ = 120V NEUTRAL

# Optional Canopy Lighting LED Fixtures

## Standard LED Canopy Lighting — 2 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 ○ = 120V NEUTRAL ⚡ = FIELD GROUND  $\overline{\overline{\overline{\quad}}}$  = CASE GROUND