



# OPTIMAX 7 FIELD RETROFIT INSTRUCTIONS



**99-24892-I001**

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## Warnings and Important Notes

All work performed must be done by a qualified electrician. Local and national electrical codes must be followed in the refurbishment of the lighting system.

Part numbers referenced in the following instructions can be purchased from the Anthony Parts Department if they are not available at your location.



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



**WARNING** – To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.



For use inside a commercial refrigeration case with packaged foods only.

### Safety

Proper safety equipment includes:



**Safety Glasses**



**Work Gloves**



**Work Shoes**



**TURN OFF ALL ELECTRICAL POWER PRIOR TO BEGINNING WORK ON THE DOOR OR ON ANY ELECTRICAL COMPONENT. USE EXTRA CAUTION WHEN WORKING WITH OR AROUND THE DOOR GLASS PACKAGE.**

### Tools

Tools required for this procedure include:

#### TOOLS

#2 Phillips-head screw driver	Rubber or plastic mallet
Cordless drill w/attachments	Flat-head screwdriver
Needle-nose pliers	Wire stripper and cutter
1/8" Drill Bit	3/8" Drill Bit



Prior to drilling, make sure there are no existing components inside the mullion in the areas marked off for the designated holes.

## Tips

- Complete replacement of wire assemblies is recommended whenever required. Splice wires only if necessary, using proper materials such as electrical tape, wire nuts, flux core solder and heat shrink.
- Apply liquid soap to rail plastic covers and gaskets upon installation, to facilitate insertion into mounting grooves.
- Keep doors and frames clean for product efficiency. This can also help reduce energy consumption and potential health hazards.
- Whenever binding gasket or plastic parts, use food grade silicone.
- Always use the correct tool for the job to be performed. This ensures proper installation and minimizes safety risks.
- The LED module is built-in type and rely upon the luminaire enclosure for protection against electric shock.
- These products shall be supplied with a certified independent SELV power supply complying with IEC/EN 61347-2-13 and - With constant output voltage equal to rated voltage of this product; and - With output current at least equal to rated current of this product
- 3. WEEE mark

## 1. Anthony Approved 24V LED Drivers

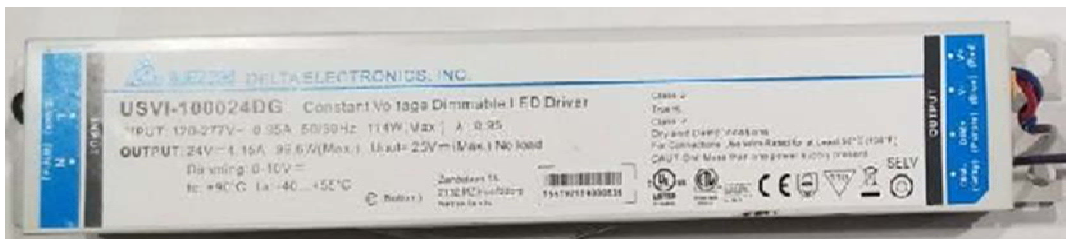
### 1.1. 24V LED Non- Dimming Driver (60-19910-0004)

- Max. Output Power: 100W
- Input Voltage: 100V – 277VAC
- Output Current: 4.10A
- Output Voltage: 24VDC
- Min. Power Factor: 0.9
- IP rating: IP64
- Operating Temperature: -40° to 60°C max
- Isolation: Class 2



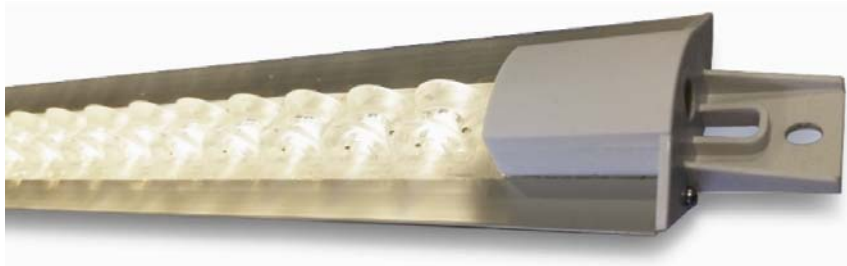
### 1.2. 24V LED Dimming Driver (60-24508-0002)

- Max. Output Power: 99.6W
- **Input Voltage: 100V – 277VAC**
- Output Current: 4.15A
- Output Voltage: 24VDC
- Min. Power Factor: 0.9
- IP rating: For Dry and Damp Locations
- Operating Temperature: -40° to 55°C max
- Isolation: Class 2



## 2. Optimax 7 24V LED Lighting :

### 2.1. OP7 Low Power



**Center Fixture (60-24826-71XXX)**



**Left End Fixture (60-24827-71XXX)**

**Right End Fixture (60-24828-71XXX)**

### OP7 Low Power Part numbers:

	<b>CENTER: 60-24826</b>	<b>LEFT END: 60-24827</b>	<b>RIGHT END: 60-24828</b>
<b>Nominal Length</b>	<b>4000K</b>	<b>4000K</b>	<b>4000K</b>
60"	-71460	-71460	-71460
72"	-71472	-71472	-71472

## 2.2. OP7 Standard Power



**Center Fixture (60-24826-72XXX)**



**Left End Fixture (60-24827-72XXX)**

**Right End Fixture (60-24828-72XXX)**

### OP7 Standard Power Part numbers:

Nominal Length	CENTER: 60-24826		LEFT END: 60-24827		RIGHT END: 60-24828	
	3500K	4000K	3500K	4000K	3500K	4000K
54"	-72354	-72454	-72354	-72454	-72354	-72454
59"	-72359	-72459	-72359	-72459	-72359	-72459
60"	-72360	-72460	-72360	-72460	-72360	-72460
72"	-72372	-72472	-72372	-72472	-72372	-72472
75"	-72375	-72475	-72375	-72475	-72375	-72475
79"	-72379	-72479	-72379	-72479	-72379	-72479

### 2.3. OP7 French Style



**Center Fixture (60-24826-73XXX)**



**Left End Fixture (60-24827-73XXX)**

**Right End Fixture (60-24828-73XXX)**

### 2.4. OP7 French Style Part numbers:

	<b>CENTER: 60-24826</b>		<b>LEFT END: 60-24827</b>		<b>RIGHT END: 60-24828</b>	
36"	-73336	--	-73336	--	-73336	--
48"	-73348	-73448	-73348	-73448	-73348	-73448
54"	-73354	-73454	-73354	-73454	-73354	-73454
59"	-73359	-73459	-73359	-73459	-73359	-73459
60"	-73360	-73460	-73360	-73460	-73360	-73460
72"	-73372	-73472	-73372	-73472	-73372	-73472
75"	-73375	-73475	-73375	-73475	-73375	-73475
79"	-73379	-73479	-73379	-73479	-73379	-73479



### 3. Hardware Kit (Per Fixture)

#### 3.1. OP7 Center Fixture Hardware Kit: 04-24985-0001

- Center mounting Clip: 60-24885-0003 (Qty 1)
- Mounting screw for Center Clip: 40-10994-1005 (Qty 1)
- Mounting screw for OP7 Center Led Fixture: 40-11114-3007 (Qty 2)

#### 3.2. OP7 End Fixture Hardware Kit with LE insulation: 04-24986-0001

- End mounting Clip: 60-24886-0001 (Qty 1)
- Mounting screw for End Clip: 40-12514-3010 (Qty 1)
- Mounting screw for OP7 End Led Fixture: 40-11114-3007 (Qty 2)

#### 3.3. OP7 End Fixture Hardware Kit without LE insulation: 04-24986-0002

- End mounting Clip: 60-24886-0001 (Qty 1)
- Mounting screw for End Clip: 40-12514-3010 (Qty 1)
- Mounting screw for OP7 End Led Fixture: 40-12514-3010 (Qty 1)

### 4. Optimax Legacy Light replacement guide

Optimax Legacy Lights		Replace by OP7
OP* Low Power	Optimax Radiant OP30	OP7 Low Power
OP* High Power	Optimax Radiant OP45	OP7 Standard Power
OPP French Style	Optimax Radiant OP55	OP7 French Style

Note: No Change to the Led Driver.

### 5. Replacing T8 Ballast

- 5.1. Install the LED power supply in the same location where the ballast was fitted or in the general location for ease of wire connection
- 5.2. Mount the LED power supply using two #8 tapping screws saved when the ballast was removed.

**NOTE:** Installer may have to drill two holes in raceway to accommodate LED power supply if the door is not an Anthony model.

**NOTE:** The LED power supply case is grounded. Attach the LED power supply to a ground point in the refrigerator directly with a screw.

- 5.3. Reinstall raceway cover(s).

## 6. Replacing Optimax Legacy Light with Optimax 7 LED

- 6.1. Locate the Mullion with Optimax Legacy LED and check for the orientation of wiring.
- 6.2. Remove the Zipper strips and contact plates to reach the wiring of the existing light.
- 6.3. Remove the Led fixture wiring from the wiring connectors in the back of the mullion.
- 6.4. Using Philips head or power drill, remove the mounting screws on the both top and bottom of the existing light
- 6.5. Gently remove the Led Fixture from the mullions including any mounting clip at the center of the mullion.
- 6.6. Locate the center of the mullion and make a 0.125" Diameter hole for the Center clip.

**NOTE: Make sure not to damage any existing wiring inside the mullion**

- 6.7. Using the Center Clip mounting screw install the Center Clip 60-24885-0003
- 6.8. Take the new Optimax 7 Led Light and remove the molex connector and the grommet from the Cable assembly using a wire Cutting tool.
- 6.9. Strip the wire ends (1/2") for wire assembly.
- 6.10. Feed the Cable assembly with through the egress hole on the mullion.
- 6.11. Make the wire connections to the existing Frame wiring inside the mullion.
- 6.12. Snap the OP7 center fixture into the Center mounting Clip.
- 6.13. Mount the fixture using 8 X 5/8 Philips screw. Note that no additional holes are needed in the mullion. Pre-existing holes from the Existing Optimax 4 installation can be used on the new Optimax 7 Fixtures.
- 6.14. Test the lights by turning on the light switch to make sure the connections are secure.
- 6.15. Place the contact plates back and secure using the zipper strips. (use new zipper strips if necessary)
- 6.16. Repeat the same process for remaining Mullions and the end Jambs.

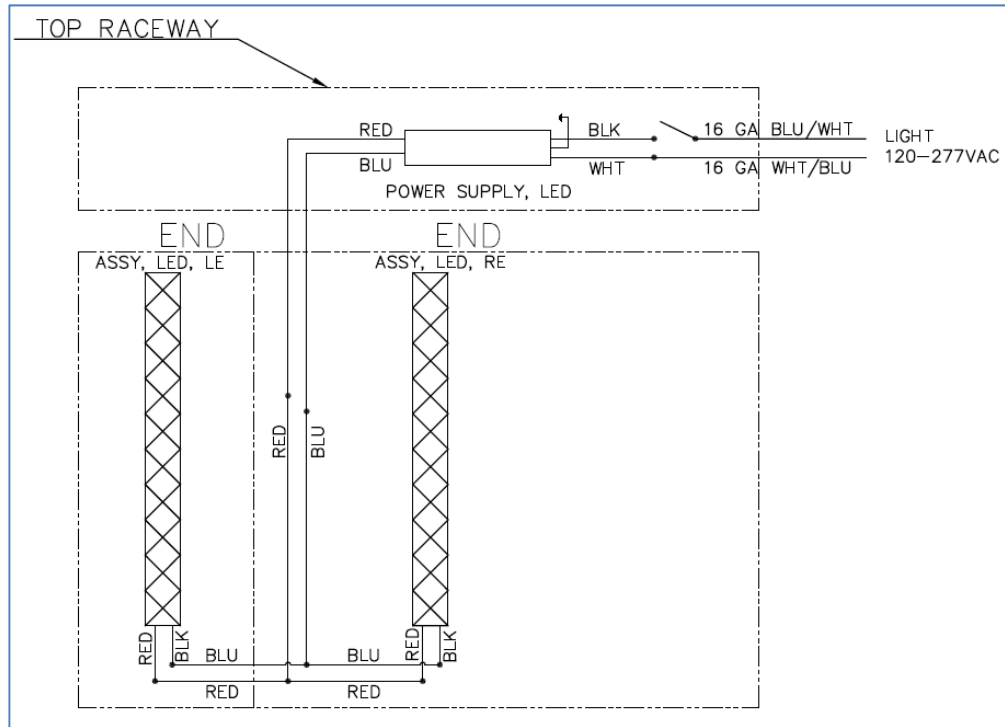
**NOTE: Mullions uses Center Fixtures: 60-24826-7XXXX and Ends use Left: 60-24827-7XXXX and Right: 60-24828-7XXXX.**

**NOTE: End Fixtures use different hardware. Refer to 3.2 and 3.3.**

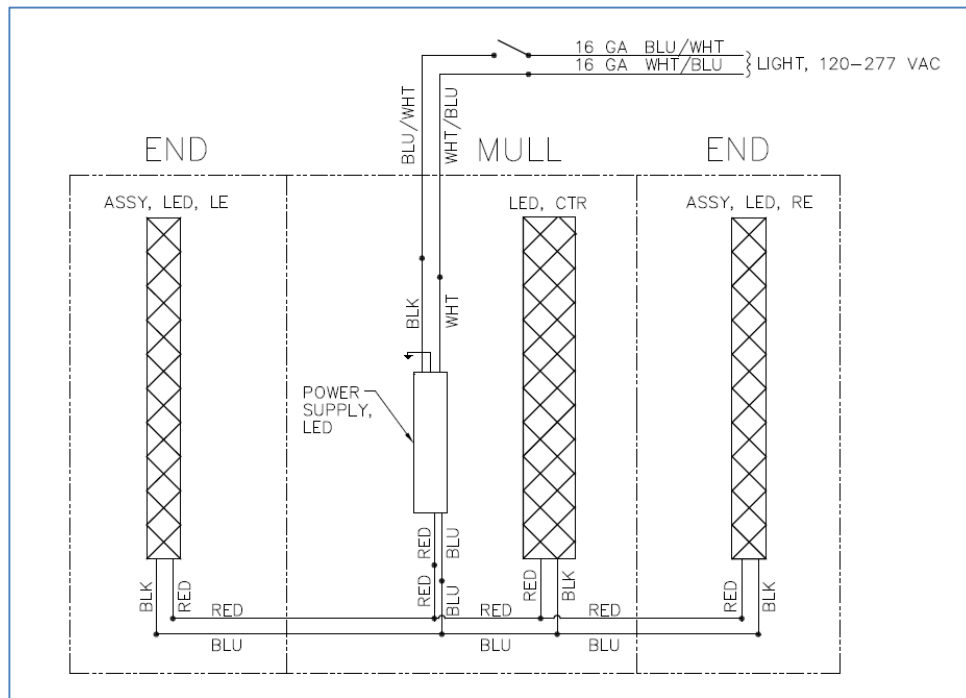
- 6.17. Turn the power on and verify all the LED fixture(s) are working.

## 7. Wiring Diagrams

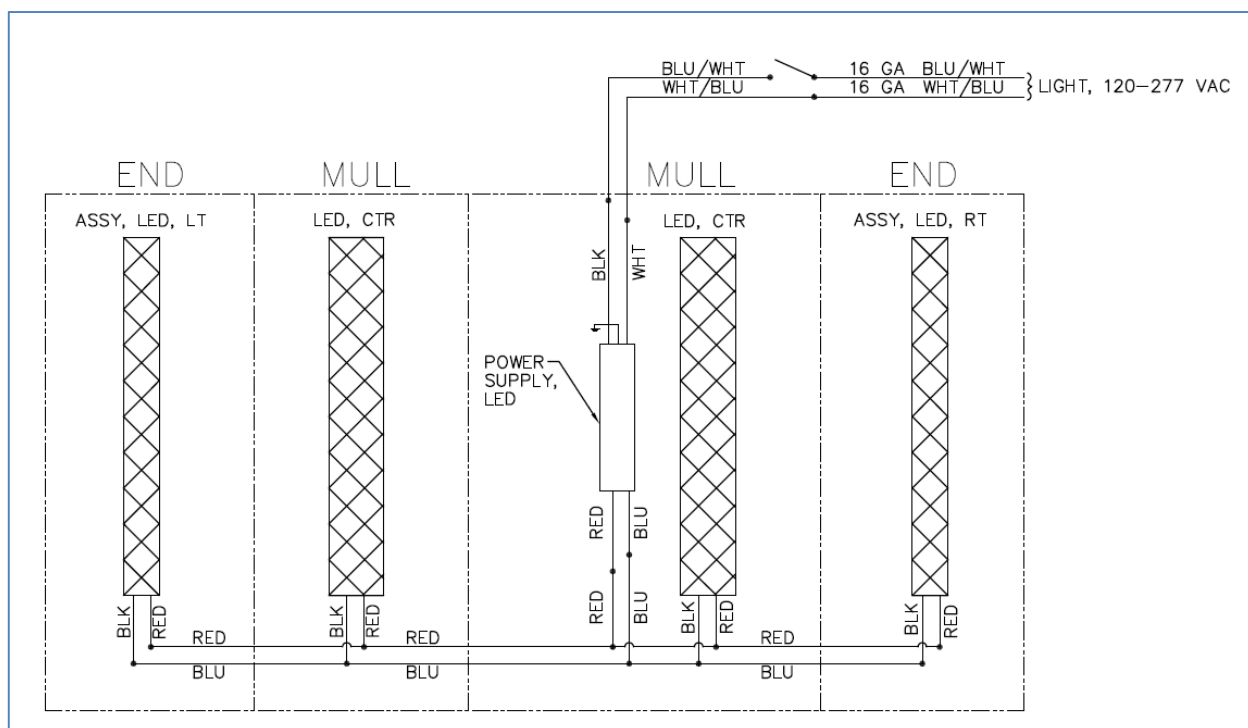
### 7.1. OP7 Low Power and Standard Power Wiring



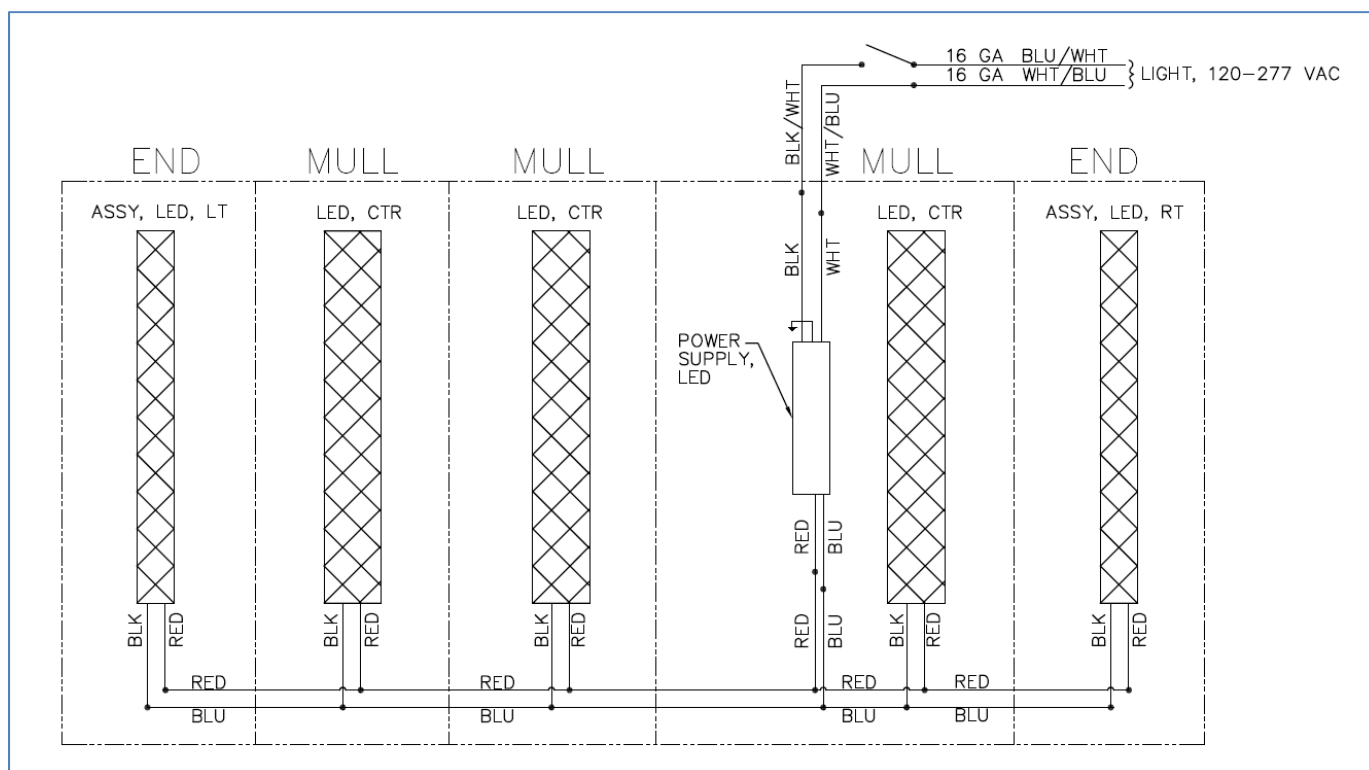
**Figure:** Wiring Diagram OP7 Low Power and Standard Power, (1 Door)



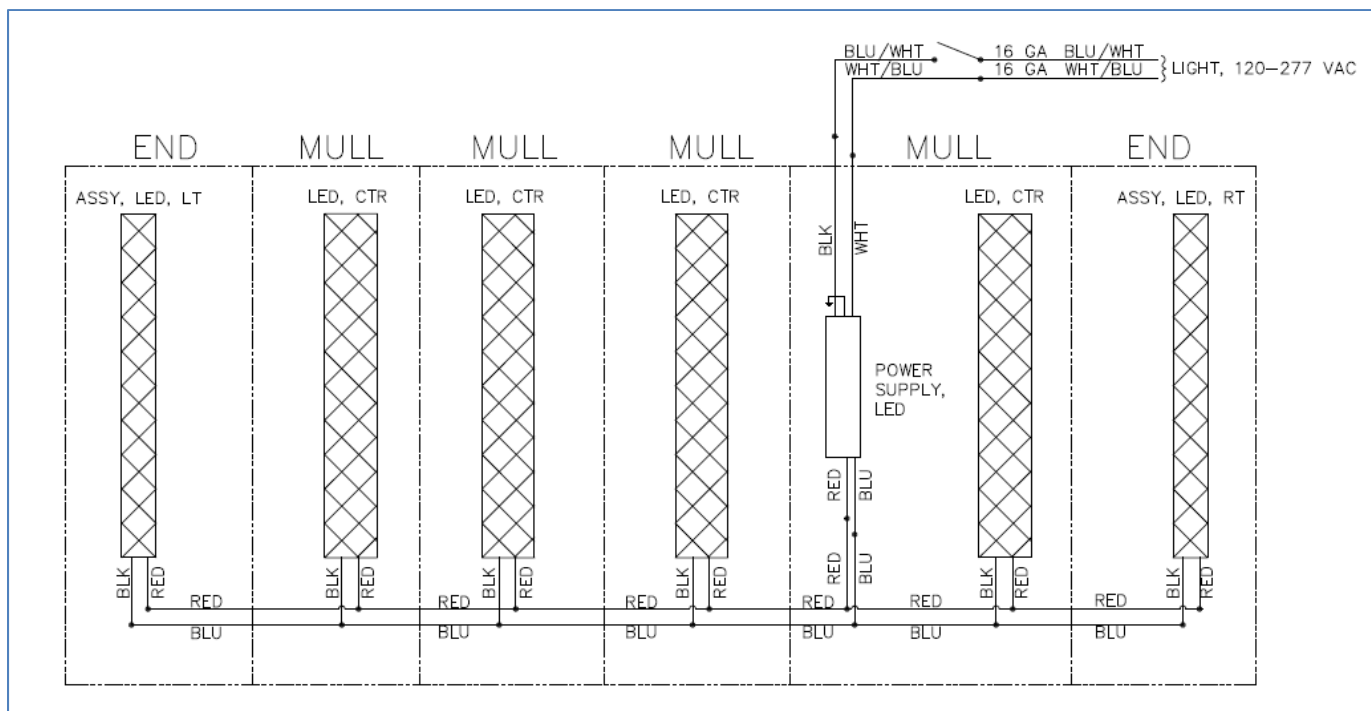
**Figure:** Wiring Diagram OP7 Low Power and Standard Power, (2 Door)



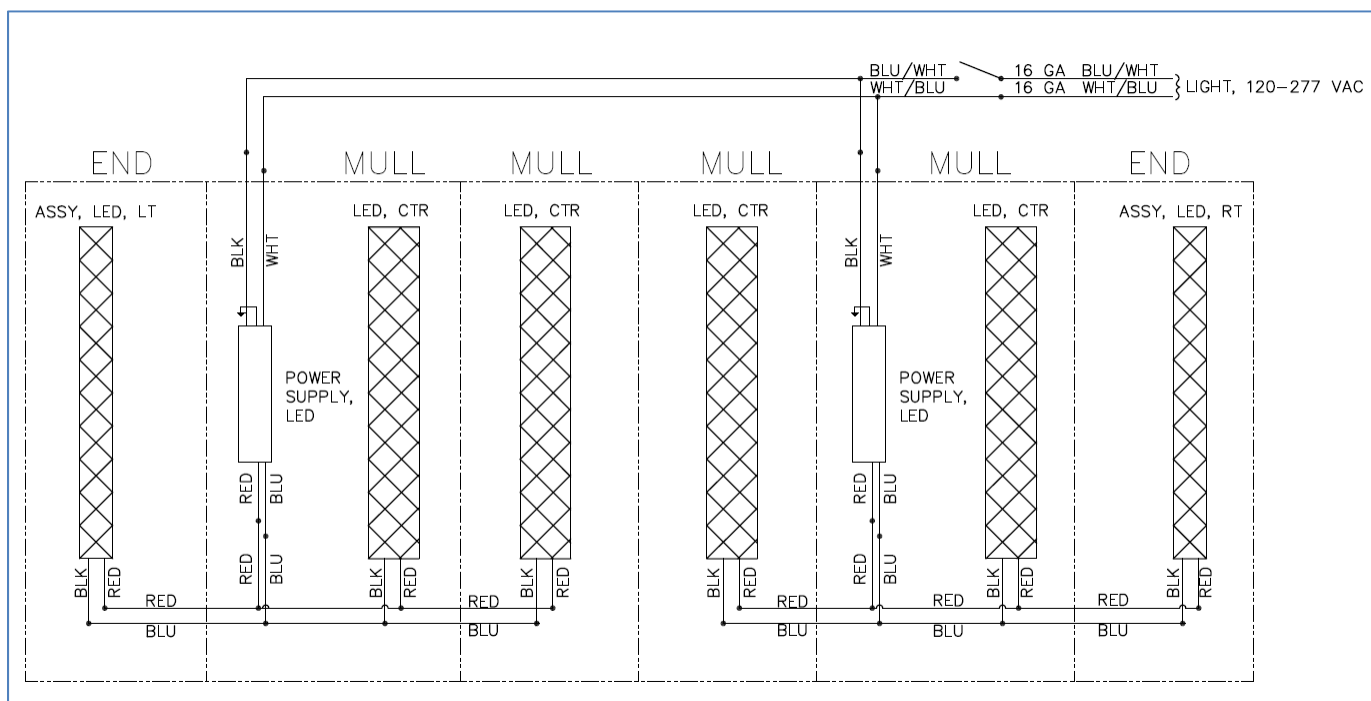
**Figure: Wiring Diagram OP7 Low Power and Standard Power, (3 Door)**



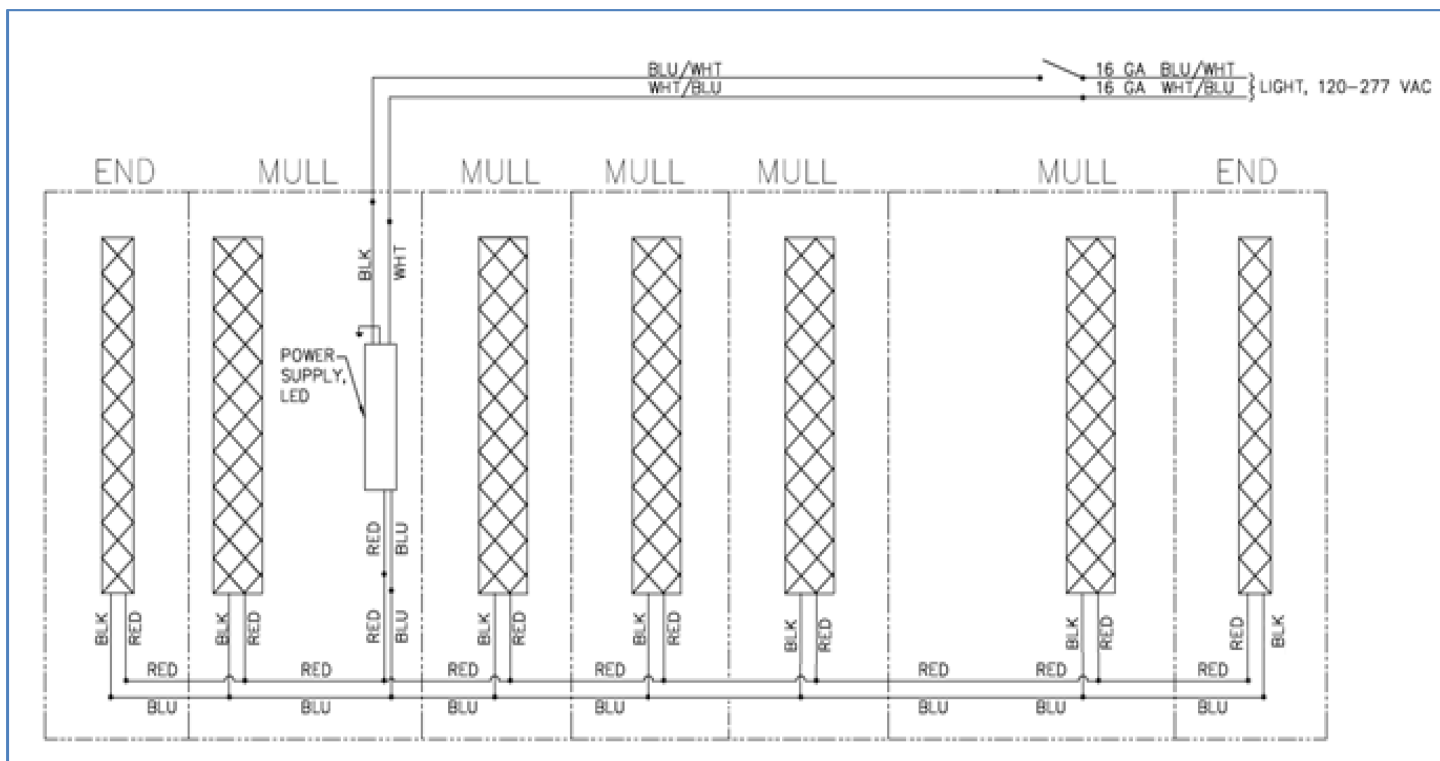
**Figure: Wiring Diagram OP7 Low Power and Standard Power, (4 Door)**



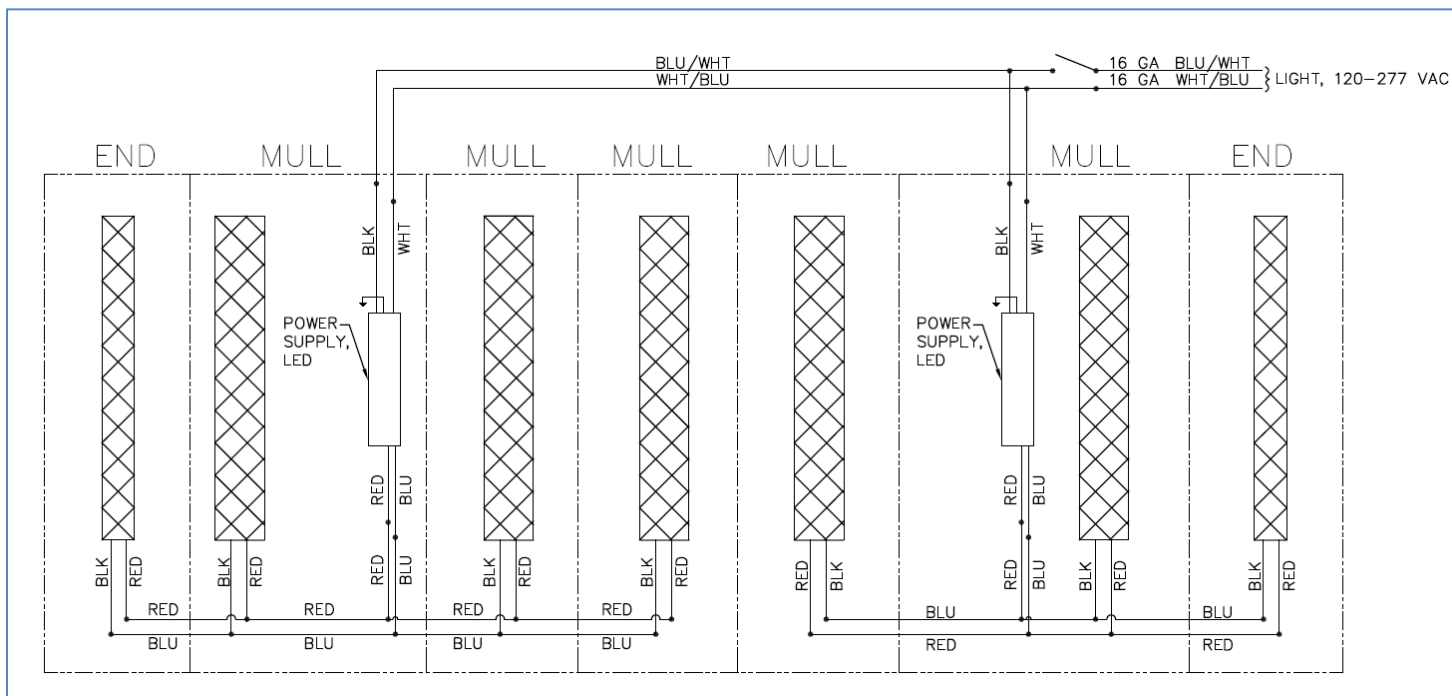
**Figure: Wiring Diagram OP7 Low Power, (5 Door)**



**Figure: Wiring Diagram OP7 Standard Power, (5 Door)**

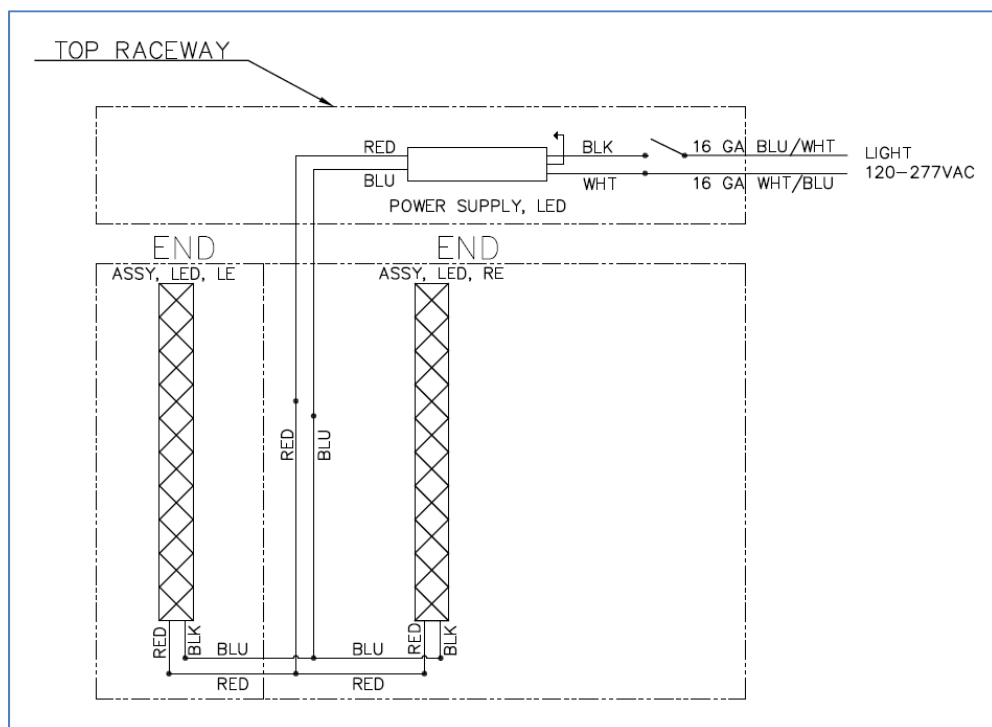


**Figure: Wiring Diagram OP7 Low Power, (6 Door)**

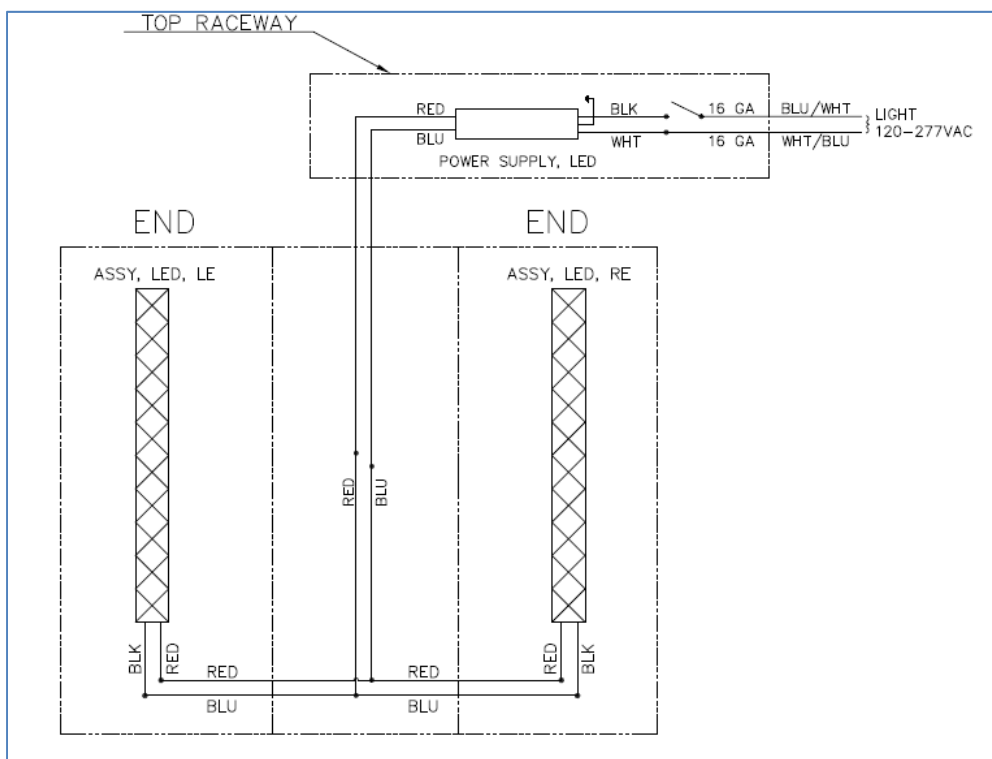


**Figure: Wiring Diagram OP7 Standard Power, (6 Door)**

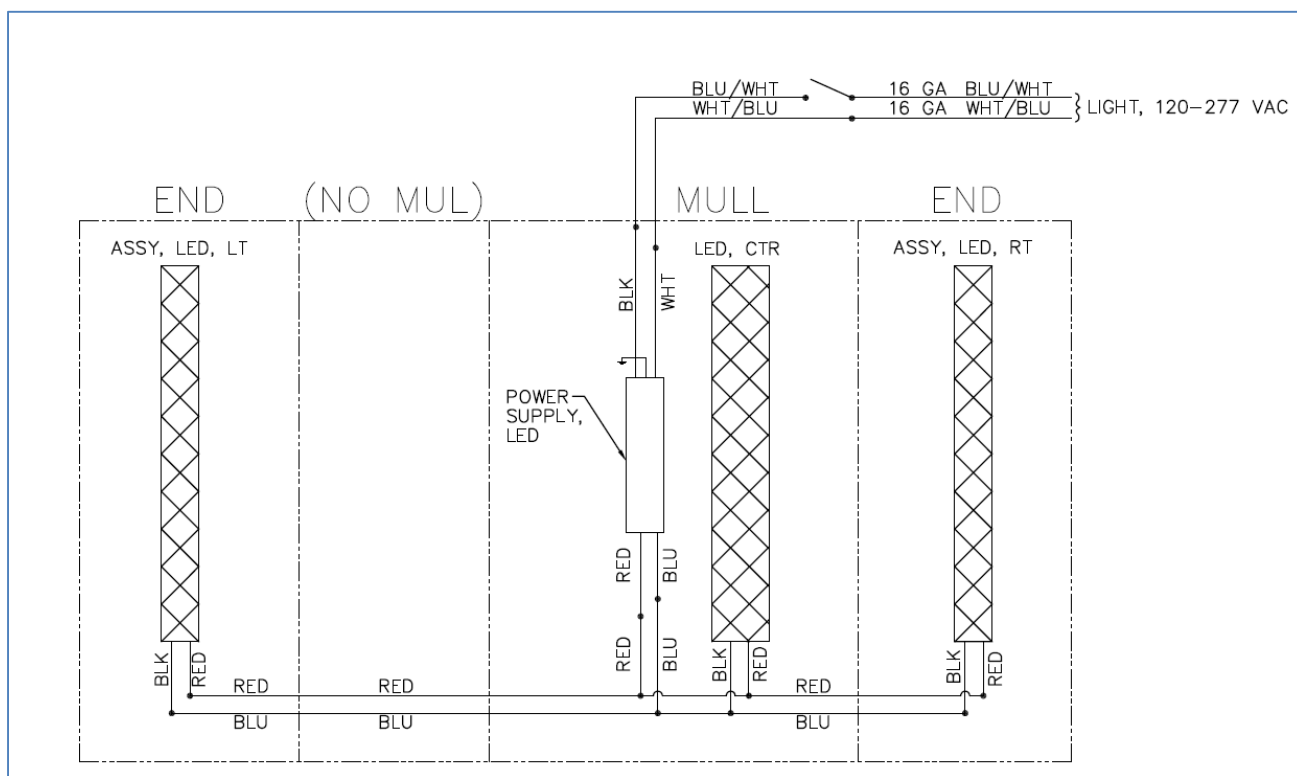
## 4.2.OP7 French Style Wiring



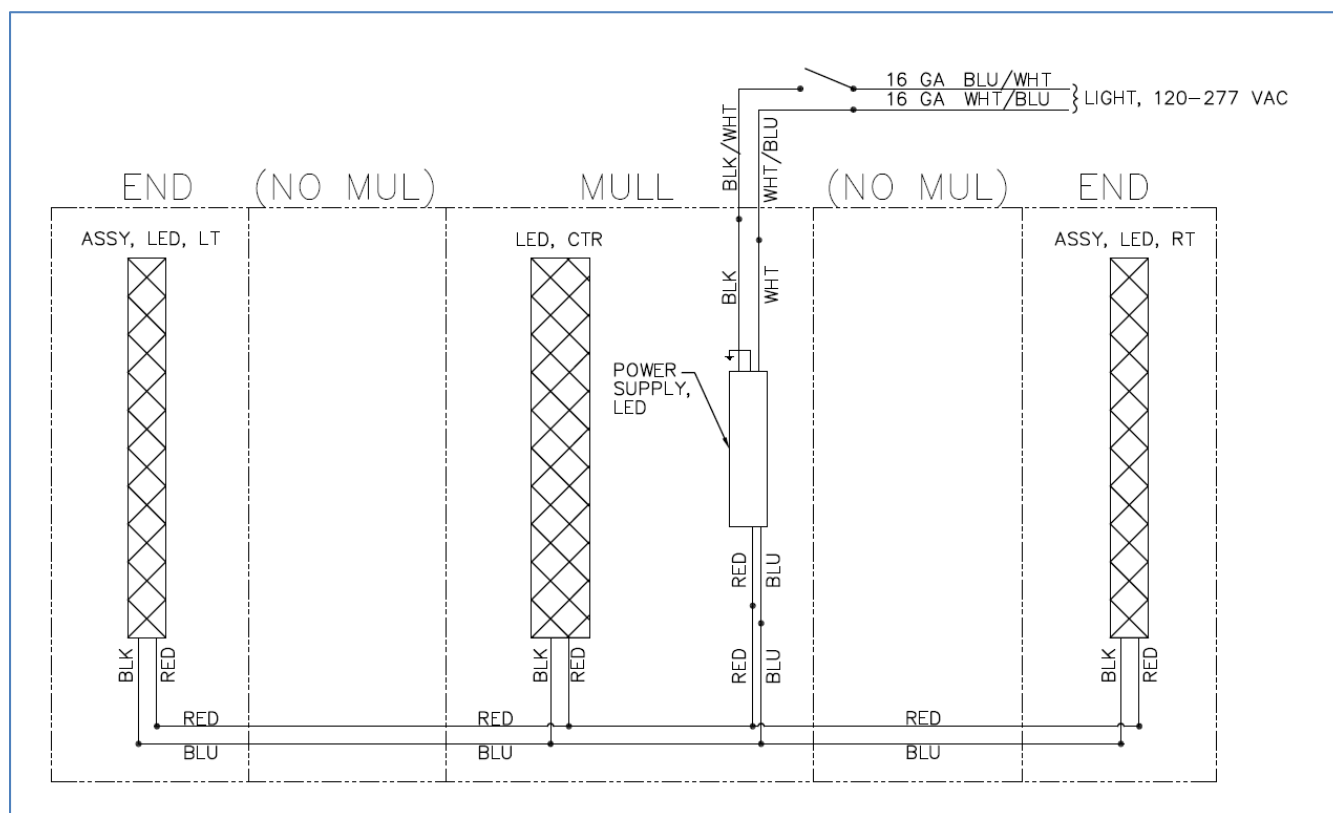
**Figure: Wiring Diagram OP7 French Style, (1 Door)**



**Figure: Wiring Diagram OP7 French Style, (2 Door)**

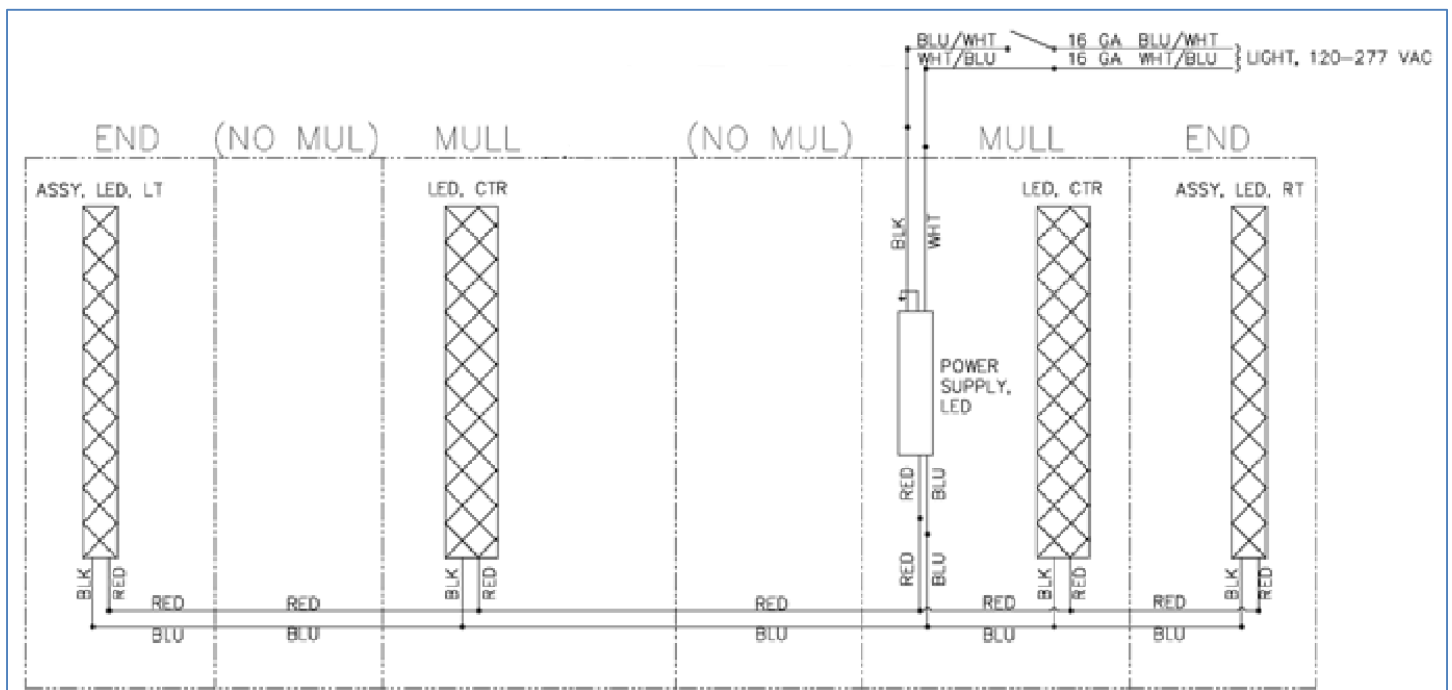


**Figure: Wiring Diagram OP7 French Style, (3 Door)**

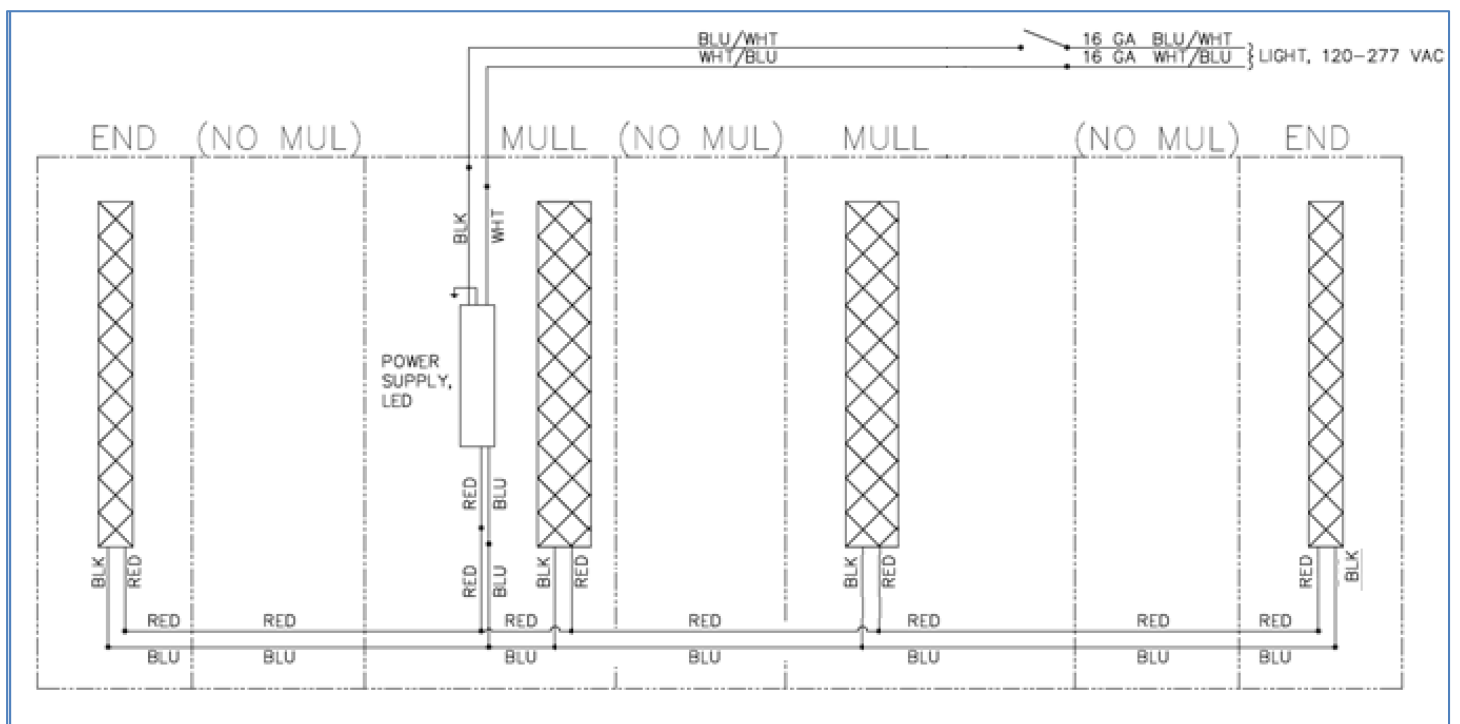


**Figure: Wiring Diagram OP7 French Style, (4 Door)**





**Figure: Wiring Diagram OP7 French Style, (5 Door)**



**Figure: Wiring Diagram OP7 French Style, (6 Door)**

## 6 Revision History

REV.	DATE	ORIGINATOR	DESCRIPTION OF CHANGE	ECN No.
FS1	05/28/20	Sai Putti	Engineering Release	-----
FS2	03/30/21	Sai Putti	See ECN 17402	17402