# Carisma® 3"



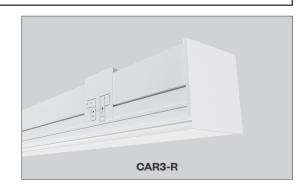


**PROJECT:** TYPE:

#### **Features**

Carisma® Recessed is part of a family of architectural linear luminaires that offer excellent performance, quality, visuals and value. A sleek edge-to-edge lens design results in an elegant aesthetic with clean lines. Carisma®'s patent pending design includes an integrated optical system that minimizes optical losses, allowing for industry-leading efficacy that meets the stringent requirements for DLC Listing (DLC Listing pending). Wide range of ceiling trim options accommodate most ceiling types, including common 4" technical grid ceiling systems.

The Carisma® Recessed offers luminaires with 2" and 3" wide apertures, delivering seamless lighting as discrete individual fixtures, continuous rows or patterns. Carisma® can be specified to the nearest 1/8" and is available in pendant, surface, wall and recessed mounted options, providing designers with the versatility to light up a space with their Carisma®.



## **Product Overview**

Direct distributrion with Recessed Mounting Type:

Wattage: 5W/ft, 10W/ft (or specify wattage between 3W/ft and 10W/ft) Color Temp: 2700K\*, 3000K, 3500K, 4000K (\*90+ CRI only)

CRI: 80+ typ. or 90+ typ.

0-10V, 1% dim, 120/277VAC (standard) Dimming (wired):

Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black

DALI. 1% dim

Dimming (wireless): Lutron Athena (integral wireless RF node)

**BubblyNet Bluetooth** 

## **Certifications**





† DLC pending

## **Fixture Summary**

## **Performance Data**

Wattage per Foot	Delivered Lumens	LPW	Color Temp	CRI
5	2632	129.5	3500K	80+
10	5253	123.1	3500K	80+

Data is based on 4' fixture, 3500K-80 120V IES files available on website.

#### **Electrical Data**

		4'		8'	
Wattage per Foot	Voltage	System Watts	Amps	System Watts	Amps
5	120V	19.8	0.17	40.2	0.34
5	277V	20.5	0.07	40.1	0.15
10	120V	38.7	0.32	80.3	0.67
10	277V	40	0.15	79	0.29

Electronic multi-volt (120-277VAC), constant current LED driver.

## **Standard Patterns**

L				7	Wall to Ceiling	Custom
Yes	Yes	Yes	Yes	Yes	No	No

## **Ceiling Types**

9/16"	15/16"	Gyp Board	Millwork	4" Tech Zone	6"Tech Zone
Yes	Yes	Yes	No	Yes	No

## Runs

Individual Runs: 2' - 8' (specify in 1' increments).

Continuous Runs: > 8' (specify to the nearest foot).

Custom: Made to measure lengths available (specify to nearest 1/8" of field dimensions). Requires approval drawings. Added cost & lead time.







## **Ordering Information**

		_•	•	HW	. 120/277 .			•	<u></u>		·
	1 2 3		4	5	6		7	8		9	10
1	Model		2	Optio	cs	3	Wattage (per	foot)	4	Color Temp	
	CAR3-R-GB gypsum board trimless	mud-	in	<b>PL</b> p	erformance lens		Standard	<u>Optional</u>		80+ CRI	90+ CRI
	CAR3-R-FLG gypsum board expose	ed flan	ge				<b>5</b> 5W/ft	<b>3*</b> 3W/ft		<b>30</b> 3000K-80+	<b>279</b> 2700K-90+
	CAR3-R-GRID grid ceiling mount						<b>10</b> 10W/ft	<b>4*</b> 4W/ft		<b>35</b> 3500K-80+	<b>309</b> 3000K-90+
								<b>6</b> 6W/ft		<b>40</b> 4000K-80+	<b>359</b> 3500K-90+
								<b>7</b> 7W/ft			<b>409</b> 4000K-90+
								8 8W/ft			
								<b>9</b> 9W/ft			
							* 3' min. lengt	h required			
5	Finish	6	Voltage	7	Length						
	HW high reflectance matte white		120/277			_ X		. X			
					Length A		Length B	Leng	th C		
					- all patterns	- a	II patterns	- PU			
					- IND	- F	R (2 lengths of 2)	- PZ			

#### 8 Configuration

IND1 individual fixture, 2' to 8' in 1' increments

CON continuous run > than 8', specify to nearest foot

**CUS** custom made to measure lengths (specify to nearest 1/8" of field dimensions)

Standard Patterns (see pg 6 for details)

PLL L left, (2) straights + (1) 90° corner, leg right

PLR L right, (2) straights + (1) 90° corner, leg left

PU U shape, (3) straight lengths + (2) 90° corners

PR Rectangle shape, (4) straight lengths + (4) 90° corners

PZ Z shape, (3) straight lengths + (2) 90° corners

## Drivers/Controls

#### Wired

- CON - CUS

0-10V 1% electronic dimming, multi-volt 120-277VAC constant current driver (standard).

HILUME-H-ECO Lutron LDE1 Hi-lume® 1% dim Soft-On/Fade-to-Black

DALI DALI dimming 120-277VAC, 1% dim

## Wireless

AWNR-WH-SR Lutron Athena wireless node, RF only, white, D4i/DALI-2

AWNR-BL-SR Lutron Athena wireless node, RF only, black, D4i/DALI-2

AWNR-WH-010 Lutron Athena wireless node, RF only, white, 0-10V

AWNR-BL-010 Lutron Athena wireless node, RF only, black, O-10V

 $\textbf{AWNR-OCC-WH-SR} \ \, \text{Lutron Athena wireless node, Occupancy \& Daylight sensor, white, D4i/DALI-2}$ 

AWNR-OCC-BL-SR Lutron Athena wireless node, Occu pancy & Daylight sensor, black, D4i/DALI-2 AWNR-OCC-WH-010 Lutron Athena wireless node, Occupancy & Daylight sensor, white, 0-10V

AWNR-OCC-BL-010 Lutron Athena wireless node, Occupancy & Daylight sensor, black, 0-10V

BN-BT-OCC-WH-SR BubblyNet Bluetooth node, Occupancy & Daylight sensor, white, D4i/DALI-2

BN-BT-OCC-WH-010 BubblyNet Bluetooth node, Occupancy & Daylight sensor, white, 0-10V

## 10 Options/Accessories

CP Chicago Plenum (CCEA)

WHIP 6' whip, 18/5 conductor

EMC-PF<sup>2</sup> emergency circuit requires power feed located in last fixture section (for other locations consult factory)

PF<sup>2</sup> Extra power feed for additional circuiting

EMB emergency battery pack (not available for lengths under 4')

<sup>2</sup> Not available with IND (individual) configuration.



 $<sup>1\</sup> Lengths\ less\ than\ 4'\ may\ have\ restrictions\ based\ upon\ wattage,\ lengths,\ drivers\ or\ other\ options.$ 



## Recessed Linear (compatible with 4" grid ceiling systems)



## PROJECT: TYPE:

## **Specifications**

#### Construction

Extruded aluminum housing and reflector. Numerous configurations accommodate most architectural ceiling conditions.

Weights: 3.5 lbs/ft (may vary based on configurations and accessories)

#### Optical

All lenses are snap-in, extruded acrylic, with a maximum length of 8'. Amerlux's proprietary acrylic lens provides excellent transmission while effectively concealing source image.

**PL** - Performance Lens provides high efficiency with controlled lens surface brightness.

#### LED

Our LED binning is within 3 MacAdam ellipse. Boards are configured for maximum flexibility resulting in even illumination no matter the fixture layout. LED boards are easily replaced in the field with just a Phillips screw driver.

 $\textbf{Color Temperature Options:}\ 2700 \text{K*}, 3000 \text{K}, 3500 \text{K}, 4000 \text{K}$ 

CRI: 80+, 90+

R9: 16 @ CRI 83; R9: >50 @ CRI 92

Life: 50,000+ hr., > 70% of initial lumens (L70)

\* Available in 90+ CRI only

#### Electrical

Wiring: Supply wires are easily accessible through access plate on top of fixture. WHIP: Optional factory installed 6' Greenfield whip (18/5 conductor) simplifies installation

Standard Wattage: 5W/ft, 10W/ft.

Optional Wattages: 3W/ft, 4W/ft, 6W/ft, 7W/ft, 8W/ft, 9W/ft. (3W & 4W have a minimum length of 3'). For other wattages consult factory.

Emergency circuit via remote inverter or auxiliary emergency power supply (by others).

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and overvoltage damage is not covered under warranty.

**EMC-PF** - Emergency circuit requires power feed wire harness to be located in last fixture section for continuous runs. For other locations consult factory. Not available for individual (IND) configuration.

 $\mbox{\bf PF}$  - Extra power feed wire harness for additional circuiting. Not available for individual (IND) configuration.

#### Finish

**HW** - High reflectance, matte white powder coat paint. Baked on finish for maximum durability and color stability.

## Configurations/Lengths

#### Straights:

**IND** - Individual fixtures are made of single standard lengths of 2 ft to 8 ft (in 1' increments). These are stand alone fixtures with matching End Caps, supplied with the mounting hardware. Lengths less than 4' may have restrictions based upon wattage, lengths, drivers or other options.

**CON** - Continuous runs, > 8' specified to nearest whole foot length in 1' increments. Runs made from standard lengths have End Caps at the beginning and end of run. Runs > 60' may require second power feed. Each housing has factory installed alignment pins. Mating fixtures are easily aligned and joined. Wiring is made fast and positive with molded quick connectors.

**CUS** - Custom made to measure runs are made to nearest 1/8" of customer supplied field measurements or drawings. Custom lengths use the same hardware for hairline joining.

#### Patterns:

**PXX**- Standard Patterns consist of 90° corners with standard lengths (4' or 8' in 1' increments), continuous runs or made to measure lengths. Depending upon complexity of the pattern drawings may be required from the customer. If ordering please give overall lengths.

**A'-B'-PLL** - L Left - (1) 90° Corner (2) segments. Specify overall segments: A' & B' **A'-B'-PLR** - L Right - (1) 90° Corner (2) segments. Specify overall segments: A' & B' **A'-B'-PR** - Rectangle - (4) 90° Corners joining (4) segments. Specify overall segments: A' & B'

**A'-B'-C'-PU** - U shape - (2) 90° Corners joining (3) segments. Specify overall segments: A'. B'. & C'

 $\mbox{A'-B'-C'-PZ}$  - Z shape - (2) 90° Corners joining (3) segments. Specify overall segments: A', B', & C'

See page 7 for layouts.

Please note: Corners have lit mitered Lens.

## Mounting

Intended for use in gypsum board, 9/16" and 15/16" grid or 4" Tech Zone and other technical ceilings.

Please note - fixtures to be installed before gypsum board ceiling.

CAR3-R-GB - gypsum board trimless mud-in, fixture plastered in gypsum board ceiling

**CAR3-R-FLQ** - gypsum board exposed flange, fixture into gypsum board ceiling **CAR3-R-GRID** - grid mount in 9/16" & 15/16" Flat Tee, 9/16" Screw Slot or 9/16" Interlude ceilings

#### Options

**EMB** - Emergency battery pack - 10W output power, 90 min of illumination time, up to 1300 lm of initial light output. Illuminated test-switch/charging indicator light is provided. Wattage consumption by EM: 2.5W/ft (4ft fixture), 1.25W/ft (8ft fixture). Request can be made to light up 4ft section on 8ft unit.

#### Certifications

Approved to UL standards for damp locations as tested by CSA Intended for indoor use only DLC Listing pending IC rated
Chicago Plenum (CCEA) optional

#### Warranty

Amerlux's 5 year limited warranty. Please consult Amerlux website for details.

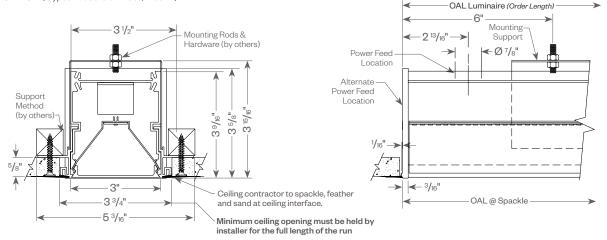




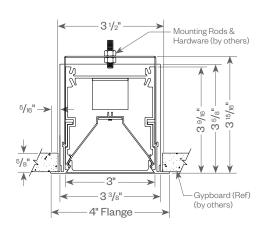


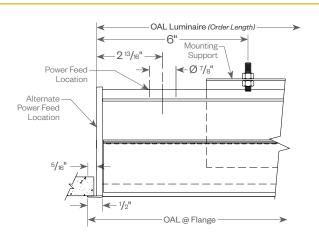
## **Product Details**

CAR3-R-GB (Gypsum board trimless, mud-in)



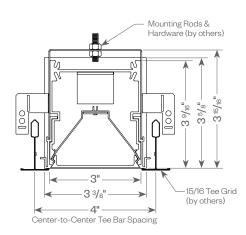
## CAR3-R-FLG (Gypsum board exposed flange)

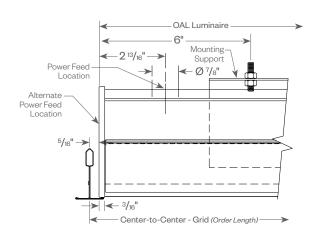




## **CAR3-R-GRID**

15/16 Tee





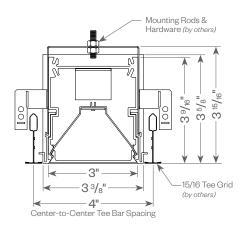


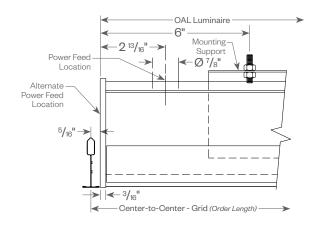




## **Product Details** (continued)

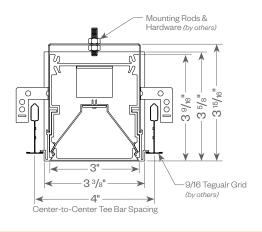
CAR3-R-GRID 9/16 Tee

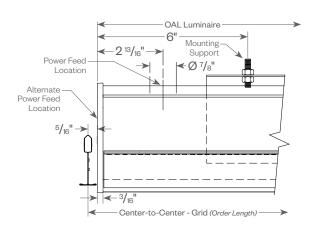




## **CAR3-R-GRID**

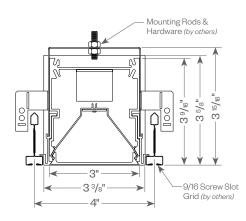
9/16 Tegular

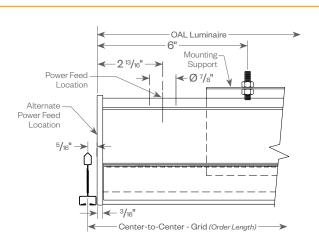




## CAR3-R-GRID

9/16 Screw Slot





Center-to-Center Tee Bar Spacing

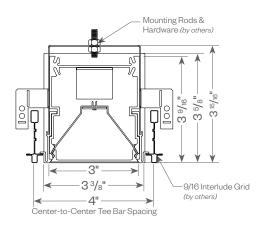


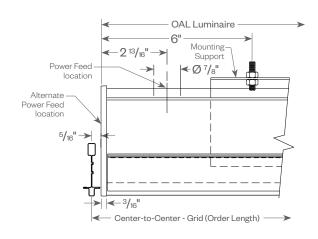




## **Product Details** (continued)

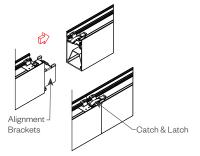
**CAR3-R-GRID** 9/16 Interlude





## **Tool-less Joining**

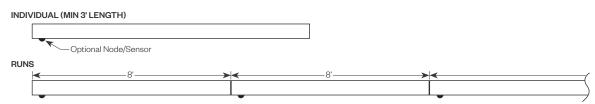
Line up the two housings using the alignment brackets. Secure them together by using the Catch & Latch System on the top of the extrusion.



## **Optional Sensor/RF Node**

Amerlux® has partnered with control companies to create building environments that are safer and smarter, than ever before. At the heart of our partnership is intelligent RF nodes and Smart Sensor, the most advanced digital wireless communication and sensors available today. Integrated into Amerlux products.

Minimum run length is 3' for wireless sensor and RF node.







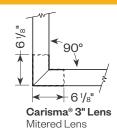


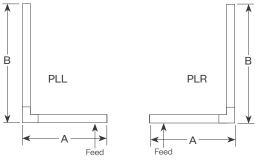
## Carisma® 2" Patterns

## Standard Patterns

All corners are standard 90°, standard length legs.
Use standard lengths: 4' to 8' in 1 foot increments.

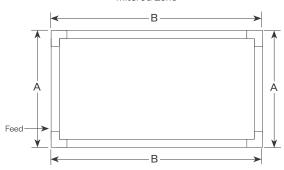
Continuous runs must be the same length in pairs for closed configuration.



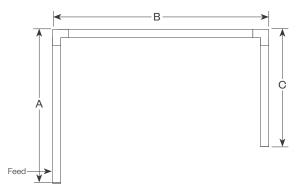


**PLL** - L Left, (2) straights + (1) 90° corner, leg right **PLR** - L Right, (2) straights + (1) 90° corner, leg left Provide overall lengths: A' & B'

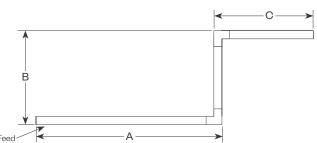
Nomenclature: A-B-PLL A-B-PLF



PR - Closed Rectangle, (4) straight lengths + (4) 90° corners Provide overall lengths: A' & B' Nomenclature: A-B-PR



PU - Open U, (3) straight lengths + (2) 90° corners Provide overall lengths: A', B' & C' Nomenclature: A-B-C-PU



**PZ** - Open Z, (3) straight lengths + (2) 90° corners Provide overall lengths: A', B' & C' Nomenclature: A-B-C-PZ







## **Performance Data**

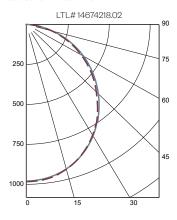
Multiplying Factors: (Multiplying Factor is based on 3500K-80120V IES file on website)

Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.59	0.78	1.0	1.20	1.40	1.60	1.79	1.98

CCT:	3000K-80	3500K-80	4000K-80	2700K-90	3000K-90	3500K-90	4000K-90
Factor:	0.97	1.0	1.02	0.90	0.92	0.92	0.94

## CARISMA® 3" DIRECT PERFORMANCE LENS 5W 3500K 4FT

Total Watts: 20 Total Lumens: 2632 Source: 192 White LED's



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1216	46.2
0-60	2099	79.8
0-90	2632	100.0
90-180	0	0.0
Efficacy (	lumens/watt)	= 129.5 lm/W

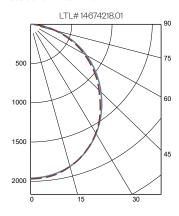
#### COEFFICIENTS OF UTILIZATION

RC		8	O	
RW	70	50	30	10
RCR				
0	119	119	119	119
1	109	104	100	96
2	99	91	84	79
3	90	80	72	65
4	83	71	62	56
5	76	63	55	48
6	70	57	48	42
7	65	52	43	37
8	61	47	39	33
9	57	44	35	30
10	53	40	32	27
	,			

Note: Values expressed as % of total lumen output delivered to the task surface.

## CARISMA® 3" DIRECT PERFORMANCE LENS 10W 3000K 4FT

Total Watts: 43 Total Lumens: 5253 Source: 192 White LED's



## ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	2431	46.3
0-60	4188	79.7
0-90	5254	100.0
90-180	0	0.0
Efficacy (	lumens/watt) :	= 123.1 lm/W

## COEFFICIENTS OF UTILIZATION

RC		8	0	
RW	70	50	30	10
RCR				
0	119	119	119	119
1	109	104	100	96
2	99	91	84	79
3	90	80	72	65
4	83	71	62	56
5	76	64	55	48
6	71	57	48	42
7	65	52	43	37
8	61	47	39	33
9	57	44	35	30
10	53	40	32	27

Note: Values expressed as % of total lumen output delivered to the task surface.







## **Dimming Compatibility**

Amerlux® Carisma® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (*Dimmer, Fixture Quantity, Voltage, etc.*) may affect dimming performance.

## --- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

0-10V Wiring Diagram

## 0-10V - DIMMING (Standard)

Integrates into a variety of building management and daylighting controls

#### Notes:

- 120V or 277V\*
- Dims down to 1% light output
- · Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Ground O-10V Dimming Control	Gray Purple Black White Green	Driver  0-10V (-) 0-10V (+) Switched Hot Neutral Ground	V+ Red V- Black
------------------------------	-------------------------------	---	-----------------

Compatible Dimmers†:					
Wall Box		Central System			
Lutron:	Wattstopper:	Leviton:	Lutron Grafixk Eye with GRX-TV1 Interface		
Diva - DVSTV	ADF-120277	Renoir II			
Maestro - MS-Z101					
Nova-T - NTSTV-DV					

#### **LUTRON LDE1 DIMMING**

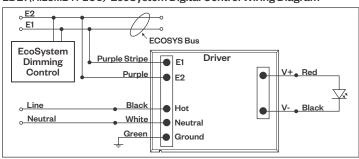
Integrates into Lutron EcoSystem building management

#### Notes:

- 120VAC or 277VAC\*
- Dims down to 1% Soft-On/Fade-to-Black
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Compatible Dimmers <sup>†</sup> :			
Lutron ECO System	Central System		
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls		
Energi Savr Node			
Grafik Eye QS/Homeworks			
QS Control Unit			
Quantum Hub			
Homeworks QS/My Room			

## LDE1 (HILUME-H-ECO) EcoSystem Digital Control Wiring Diagram



## Notes:

- \* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.







## **Dimming Compatibility** (continued)

Amerlux® Carisma® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc.) may affect dimming performance.

## --- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

## **DALI - DALI DIMMING 120V-277V**

Digital control protocol allows individual fixture control

#### Notes:

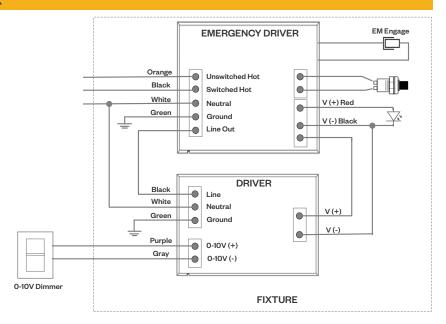
- 120VAC 277VAC\*
- · Dims down to 1% light output in most cases

Compatible Dimmers <sup>†</sup> :			
Wall Box	Central System		
Leviton CD250 Controller	Dynalite		
	Fifth Light		

#### **DALI Wiring Diagram** DALI Purple Driver Dimming Control V+ Red Purple/WT <u>Line</u> Black Black <u>Neutr</u>al White Neutral Green Ground

## **Emergency Fixture with Built-In Battery Pack**

Emergency fixture with built-in battery pack (*EMB*) wiring: Note: *EMB* not available on lengths under 4'.



## Notes:

- \* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.