Carisma® 2”

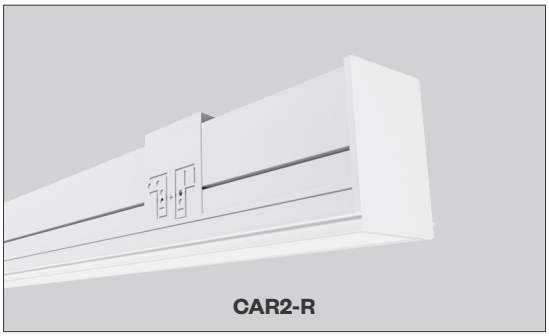
Recessed Linear

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.

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®.



CAR2-R

Product Overview

Type:	Direct distributrion with Recessed Mounting
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.
Dimming *(wired)*:	0-10V, 1% dim *(standard)* Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black DALI, 1% dim
Dimming *(wireless)*:	Lutron Athena *(integral wireless RF node)* BubblyNet Bluetooth

Certifications

5 year limited warranty AMERLUX LED

† DLC pending

Fixture Summary

Performance Data

Wattage per Foot	Performance Lens		Asymmetric Lens		Wide Optic Direct Lens	
	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
5	2519	126.8	2693	135.6	2565	128.3
10	4755	122.8	5408	128.6	4959	124

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
	277V	20.5	0.07	40.1	0.15
10	120V	38.7	0.32	80.3	0.67
	277V	40	0.15	79	0.29

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

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.

Standard Patterns

					Wall to Ceiling	Custom
Yes	Yes	Yes	Yes	Yes	No	No

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PROJECT:	TYPE:

Ordering Information

_____ . _____ . _____ . _____ . HW . 120/277 . _____ . _____ . _____ . _____

1 2 3 4 5 6 7 8 9 10

1 Model

CAR2-R-GB gypsum board trimless mud-in

CAR2-R-FLG gypsum board exposed flange

CAR2-R-GRID grid ceiling mount

2 Optics

PL performance lens

ASY asymmetric lens

WOD wide optic direct lens

3 Wattage *(per foot)*

Standard	Optional
5 5W/ft	**3*** 3W/ft
10 10W/ft	**4*** 4W/ft
	6 6W/ft
	7 7W/ft
	8 8W/ft
	9 9W/ft

***** *3' min. length required*

4 Color Temp

80+ CRI	90+ CRI
30 3000K-80+	**279** 2700K-90+
35 3500K-80+	**309** 3000K-90+
40 4000K-80+	**359** 3500K-90+
	409 4000K-90+

5 Finish

HW high reflectance matte white

6 Voltage

120/277

7 Length

_____ X _____ X _____

Length A	Length B	Length C
- all patterns	- all patterns	- PU
- IND	- PR *(2 lengths of 2)*	- PZ
- CON		
- CUS		

8 Configuration

IND[1] 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

9 Drivers/Controls

Wired

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, 0-10V

AWNR-OCC-WH-SR 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[2] emergency circuit requires power feed located in last fixture section *(for other locations consult factory)*

PF[2] Extra power feed for additional circuiting

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

1 Lengths less than 4' may have restrictions based upon wattage, lengths, drivers or other options.
2 Not available with IND (individual) configuration.

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PROJECT: **TYPE:**

Specifications

Construction

Extruded aluminum housing and reflector. Numerous configurations accommodate most architectural ceiling conditions.
Weights: 3 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.
ASY - Asymmetric distribution for wallwashing.
WOD - Wide Optic Direct lens for maximizing fixture spacing.

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.
Color Temperature Options: 2700K*, 3000K, 3500K, 4000K
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.
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'
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 ceilings.
Please note - fixtures to be installed before gypsum board ceiling.
CAR2-R-GB - gypsum board trimless mud-in, fixture plastered in gypsum board ceiling
CAR2-R-FLG - gypsum board exposed flange, fixture into gypsum board ceiling
CAR2-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.

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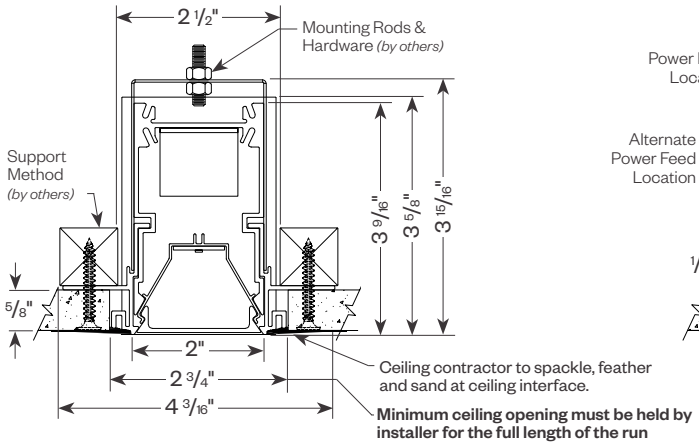
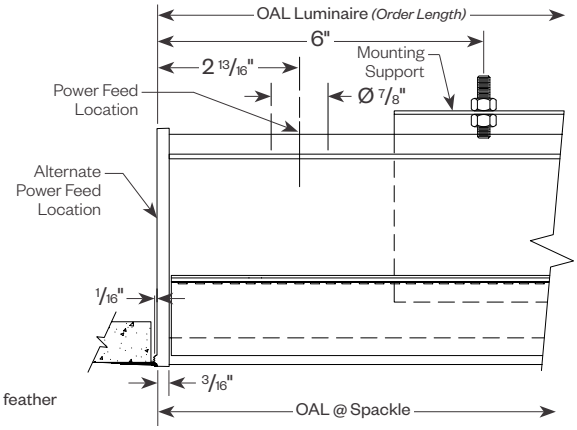
PROJECT: **TYPE:**

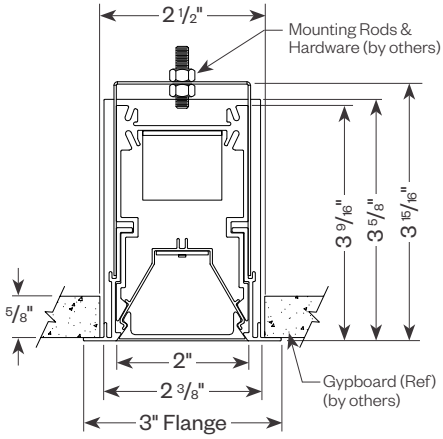
Product Details

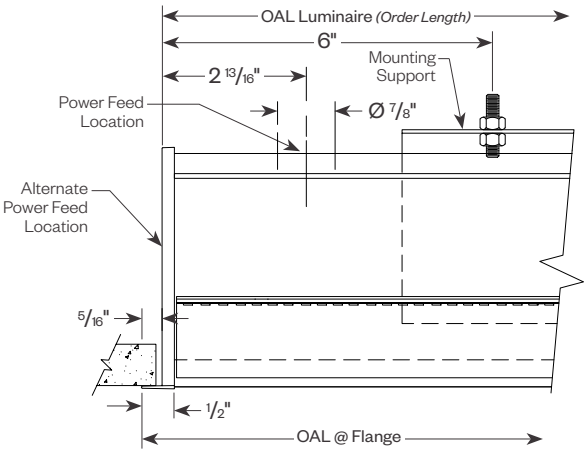
CAR2-R-GB *(Gypsum board trimless, mud-in)*





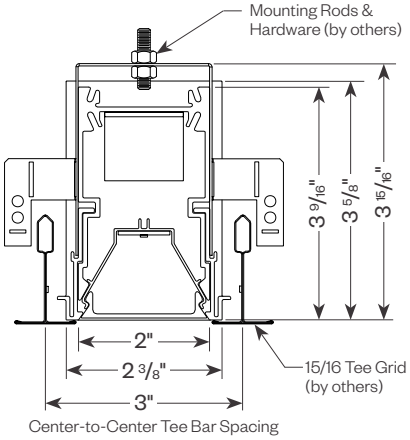
CAR2-R-FLG *(Gypsum board exposed flange)*

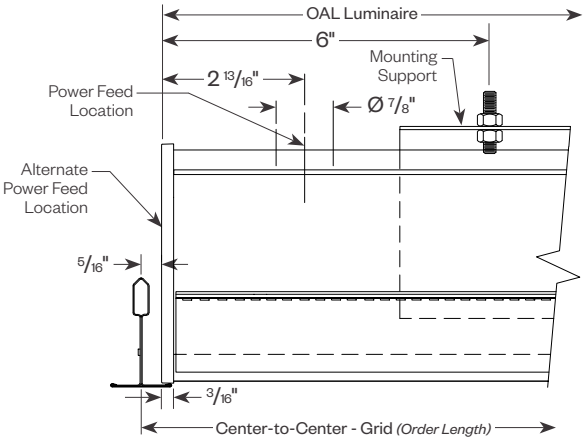




CAR2-R-GRID

15/16 Tee





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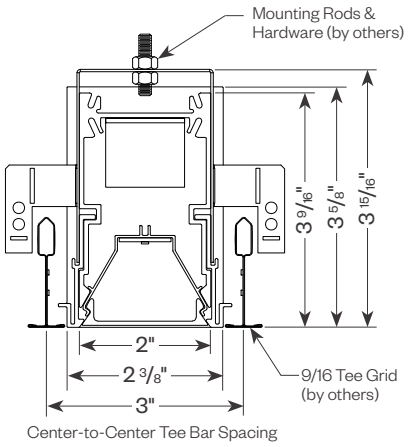
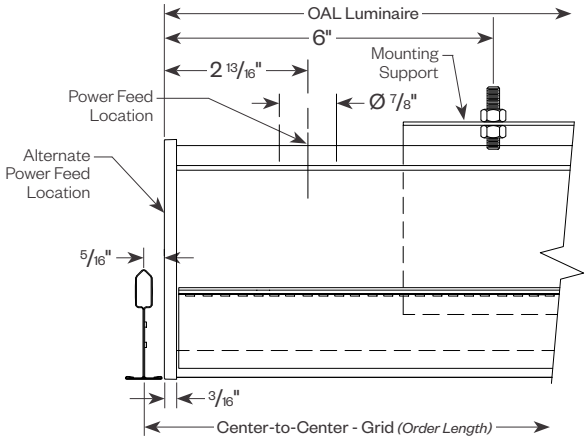
PROJECT: **TYPE:**

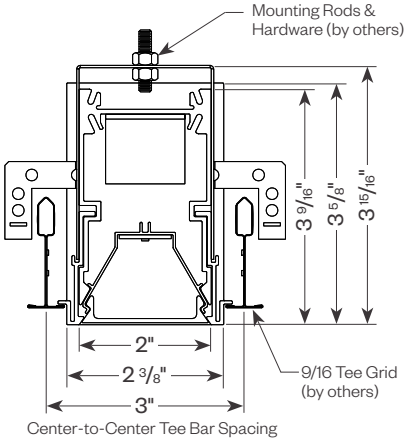
Product Details *(continued)*

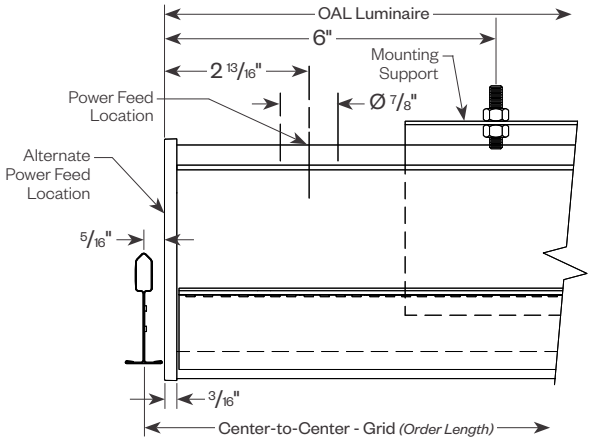
CAR2-R-GRID
9/16 Tee



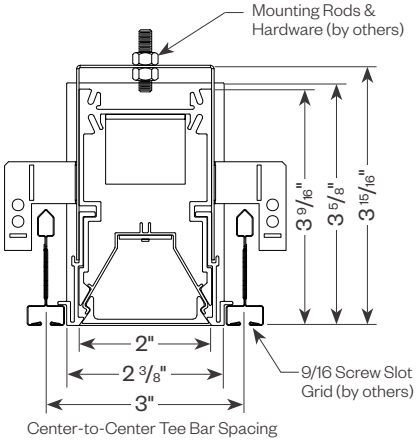


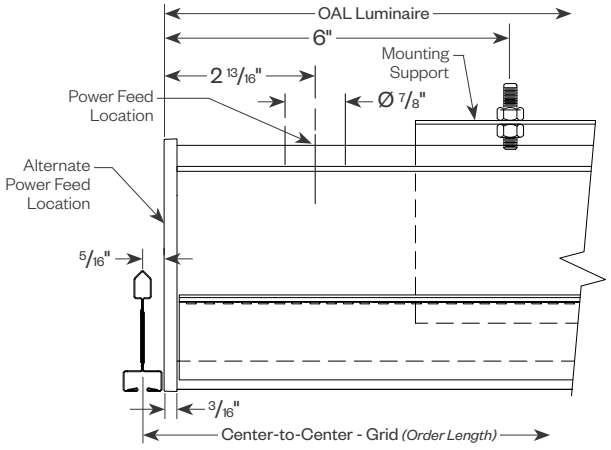
CAR2-R-GRID
9/16 Tegular





CAR2-R-GRID
9/16 Screw Slot





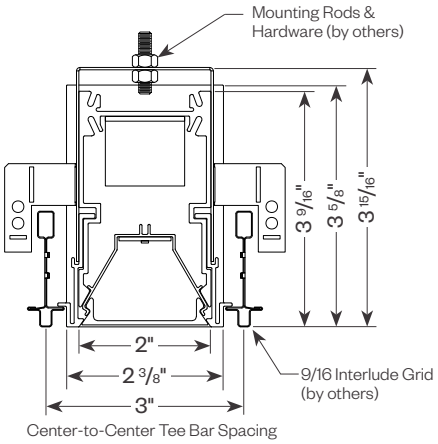
Carisma® 2”

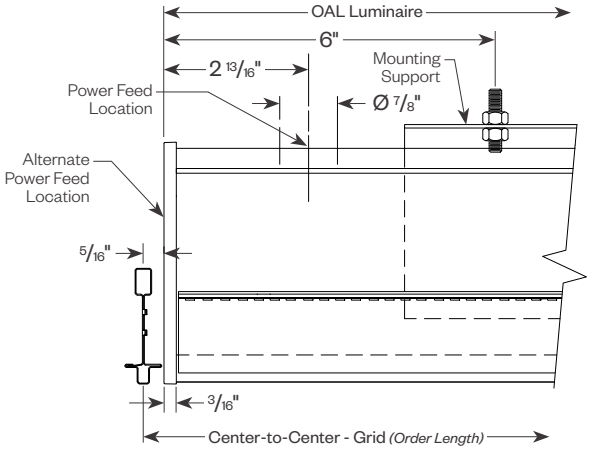
Recessed Linear

PROJECT: **TYPE:**

Product Details *(continued)*

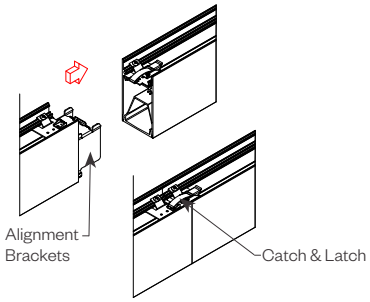
CAR2-R-GRID
9/16 Interlude





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.

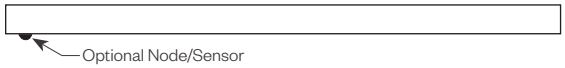


Optional Sensor/RF Node

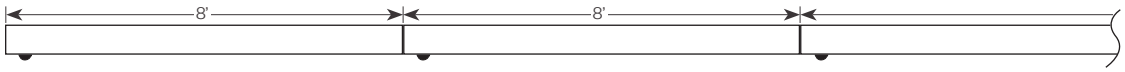
Amerlux® has partnered with control companies to create building environments that are safer and smarter, than ever before. At the heart of our partnership is intelligent RF nodes and Smart Sensor, the most advanced digital wireless communication and sensors available today. Integrated into Amerlux products.

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

INDIVIDUAL (MIN 3' LENGTH)



RUNS



Carisma® 2”

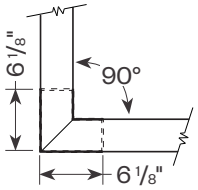
Recessed Linear

PROJECT: **TYPE:**

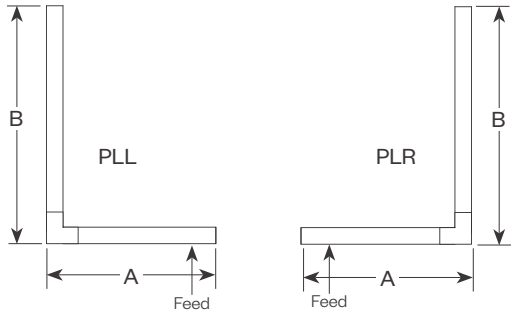
Carisma® 2” Patterns

Standard Patterns

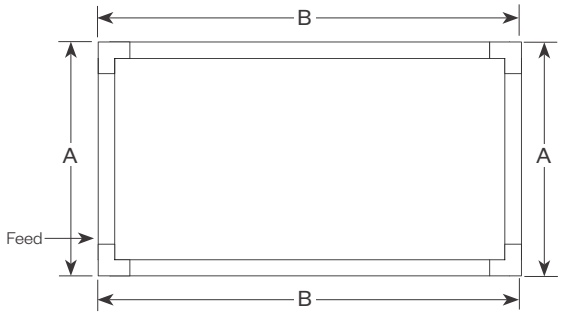
All corners are standard 90°, standard length legs.
Use standard lengths: 4' to 8' in 1 foot increments.
Continuous runs must be the same length in pairs for closed configuration.



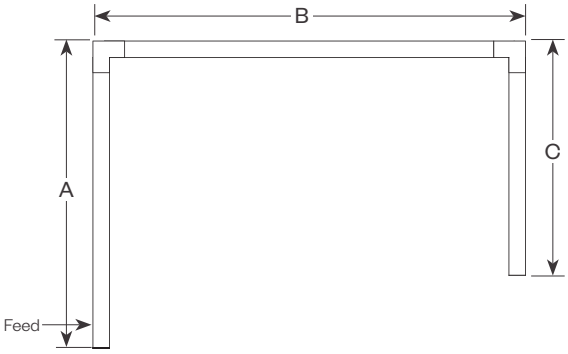
Carisma® 2" Lens
Mitered Lens



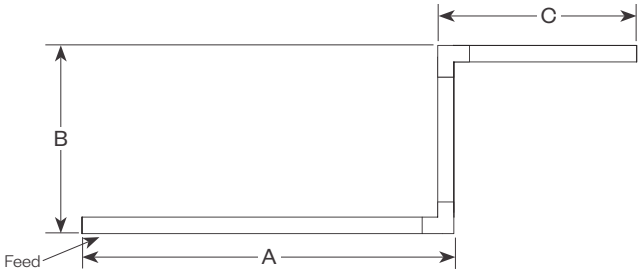
PLL - L Left, *(2)* straights + *(1)* 90° corner, leg right
PLR - L Right, *(2)* straights + *(1)* 90° corner, leg left
Provide overall lengths: A' & B'
Nomenclature: A-B-PLL A-B-PLR



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

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PROJECT:	TYPE:

Performance Data

Multiplying Factors: *(Multiplying Factor is based on 3500K-80 120V IES file on website)*

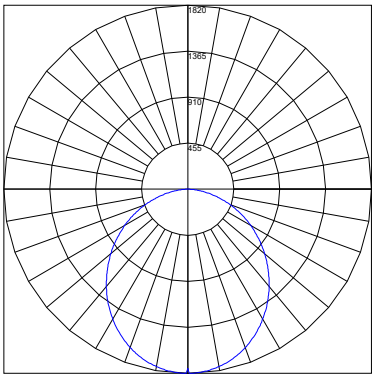
Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.30	0.39	0.51	0.61	0.71	0.81	0.90	1.0

CCT:	3000K-80	3500K-80	4000K-80	2700K-90	3000K-90	3500K-90	4000K-90
Factor:	0.97	1.0	1.02	0.93	0.98	0.98	1.02

	Performance Lens		
Ordered Wattage/Ft	Tested Wattage/Ft	Lumens per Ft	LPW
3	3.02	372	123
4	3.95	491	124
5	4.96	630	127
6	6.00	756	126
7	6.98	882	126
8	8.00	1008	125
9	9.00	1128	125
10	9.66	1189	123

Data is based on 3500K, 80CRI

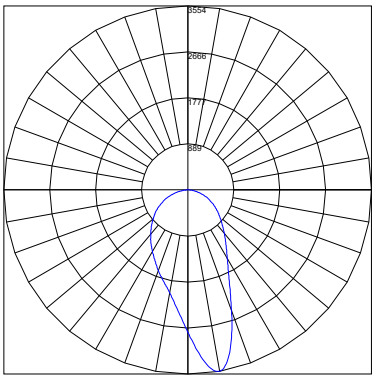
LTL# 14656342.03 10W, 3500K, 80CRI



	Asymmetric Lens		
Ordered Wattage/Ft	Tested Wattage/Ft	Lumens per Ft	LPW
3	3.02	397	131
4	3.95	525	133
5	4.96	673	136
6	6.00	808	135
7	6.98	942	135
8	8.00	1077	135
9	9.00	1205	134
10	10.50	1352	129

Data is based on 3500K, 80CRI

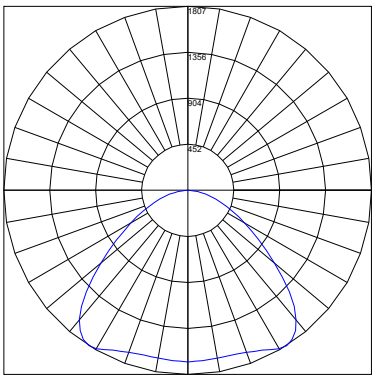
LTL# 15335267.02 10W, 3500K, 80CRI



	Wide Optic Lens		
Ordered Wattage/Ft	Tested Wattage/Ft	Lumens per Ft	LPW
3	3.02	378	125
4	3.95	500	127
5	4.96	641	129
6	6.00	769	128
7	6.98	897	129
8	8.00	1026	128
9	9.00	1147	127
10	9.90	1240	125

Data is based on 3500K, 80CRI

106235021CRT-001 10W, 3500K, 80CRI



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amerlux

PROJECT:	TYPE:

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 ---

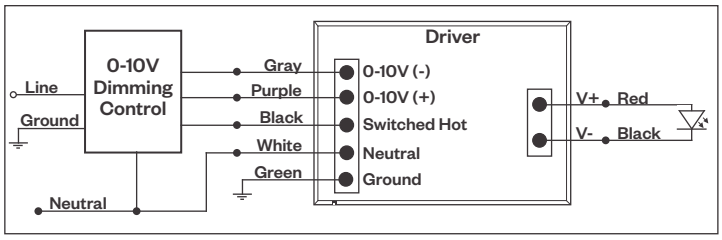
0-10V - DIMMING *(Standard)*

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!**

0-10V Wiring Diagram



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			

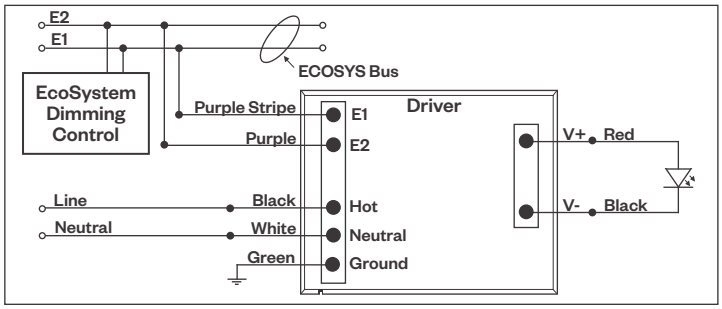
LUTRON LDE1 DIMMING

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!**

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



Compatible Dimmers†:	
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	

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.

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DALI - DALI DIMMING 120V-277V

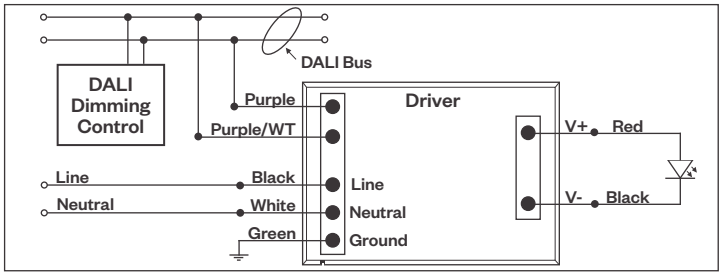
Digital control protocol allows individual fixture control

Notes:

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

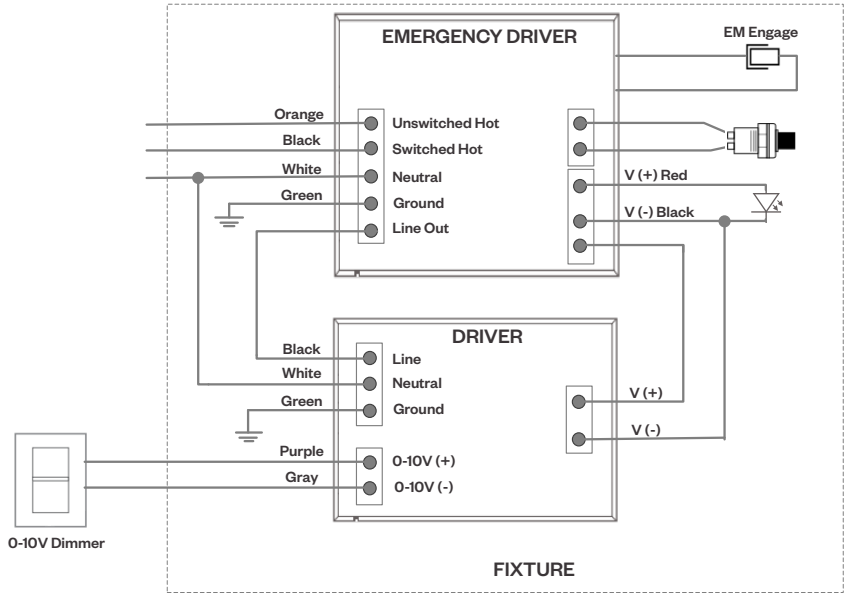
Compatible Dimmers†:	
Wall Box	**Central System**
Leviton CD250 Controller	Dynalite
	Fifth Light

DALI Wiring Diagram



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.