

Carisma 3"

Recessed Linear LED



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.

Product Overview

Type:	Direct distribution with recessed mounting
Wattage:	5W/ft, 10W/ft (or specify wattage between 3W/ft & 10W/ft)
Color Temp:	2700K*, 3000K, 3500K, 4000K (* 90+ CRI only)
CRI:	80+ or 90+
Dimming (wired):	0-10V, 1% dimming (standard) Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black DALI dimming, 1% dim
Dimming (wireless):	Enlighted Sensor Lutron Athena (integral wireless RF node)

PROJECT:

TYPE:

Fixture Summary (see following pages for more information)

Ceiling Types

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

Performance Chart

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 3500K-80 IES files available on website
Data is based on 4' fixture with Performance lens

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.

Electrical Data

Wattage Per Foot		4'		8'	
		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

Standard Patterns

"L"	"J"	"U"	"O"	"Z"	Wall to Ceiling	Custom
Yes	Yes	Yes	Yes	Yes	No	No



5 year limited warranty
AMERLUX LED



† DLC pending

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PROJECT:

TYPE:

Ordering Information



- 1 Model**
CAR3-R-GB - gypsum board trimless mud-in
CAR3-R-FLG - gypsum board exposed flange
CAR3-R-GRID - grid ceiling mount

- 2 Optics**
PL - performance lens

- 3 Wattage (per foot)**
Standard:
5 - 5W/ft
10 - 10W/ft
Optional:
3 - 3W/ft (3' minimum length required)
4 - 4W/ft (3' minimum length required)
6 - 6W/ft
7 - 7W/ft
8 - 8W/ft
9 - 9W/ft

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

- 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 page 8 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, (4) straight lengths + (4) 90° corners
PZ - Z shape, (3) straight lengths + (2) 90° corners

- 9 Drivers/Controls**
Wired - Static White:
0-10V - 1% electronic dimming, multi-volt (120-277VAC) constant current driver (standard).
HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black
DALI - DALI Dimming 120-277VAC, 1% dim
Wireless - Static White:
ENLS-SR - Enlighted sensor, energy metering (not available on 2' & 3' lengths)
ENLS-010 - Enlighted sensor with controller unit (not available on 2' & 3' lengths)
AWN-R-WH-SR - Lutron Athena wireless node, RF only, white, D4i/DALI-2
AWN-R-BL-SR - Lutron Athena wireless node, RF only, black, D4i/DALI-2
AWN-R-WH-010 - Lutron Athena wireless node, RF only, white, 0-10V
AWN-R-BL-010 - Lutron Athena wireless node, RF only, black, 0-10V
AWNS-OCC-WH-SR - Lutron Athena wireless node, Occupancy & Daylight sensor, white, D4i/DALI-2
AWNS-OCC-BL-SR - Lutron Athena wireless node, Occupancy & Daylight sensor, black, D4i/DALI-2

- 10 Options/Accessories**
CP - Chicago Plenum (CCEA)
WHIP - 6' whip, 18/5 conductor
EMC-PF² - emergency circuit requires power feed located in last fixture section (for other locations consult factory)
PF² - 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.

Weight: 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.

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 over voltage 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' to 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 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-FLG - 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.

Carisma 3"

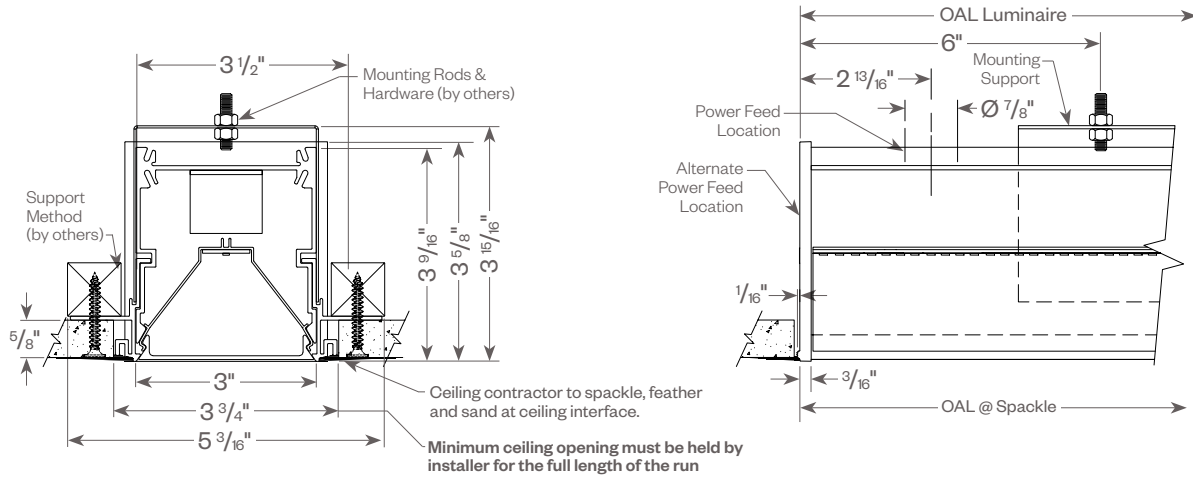
Recessed Linear LED



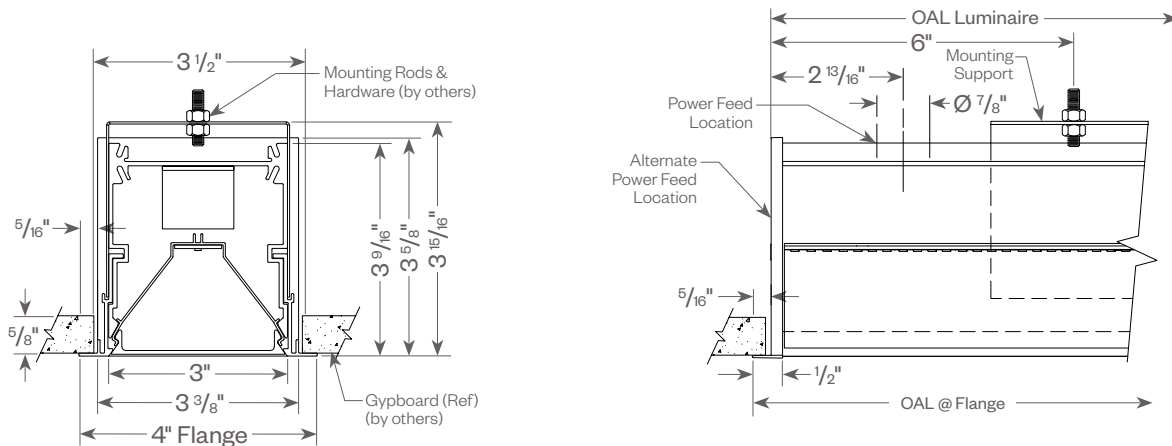
PROJECT:

TYPE:

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

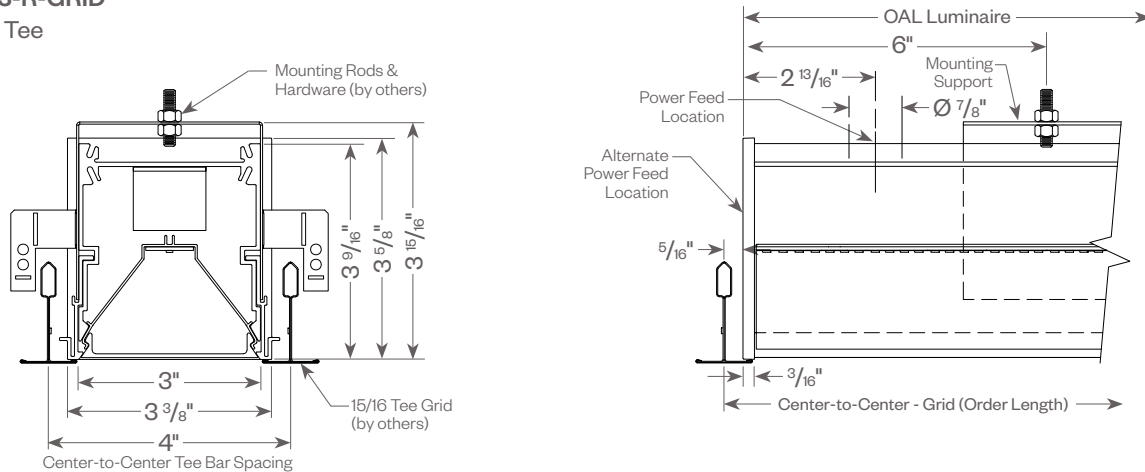


CAR3-R-FLG (Gypsum board exposed flange)



CAR3-R-GRID

15/16 Tee



Carisma 3"

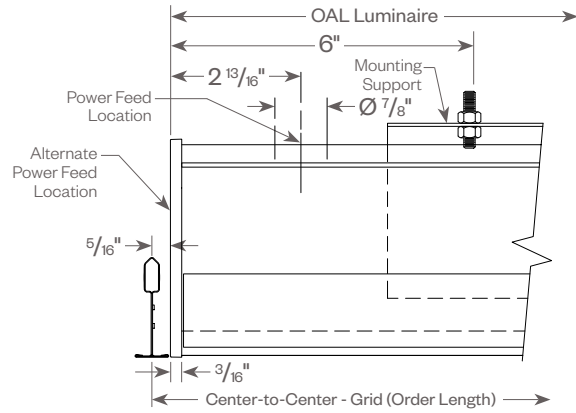
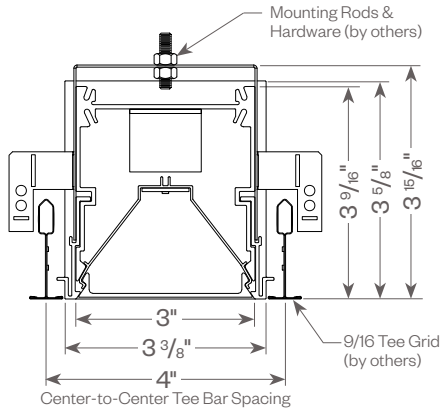
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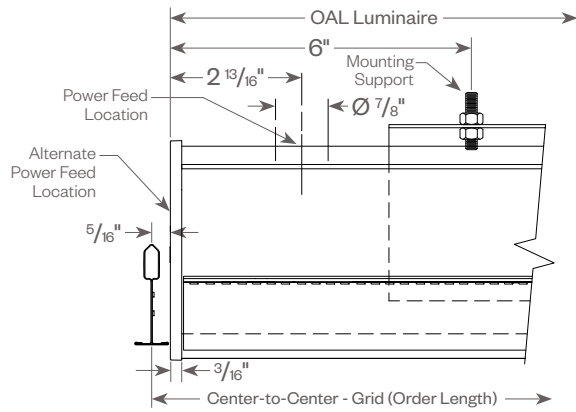
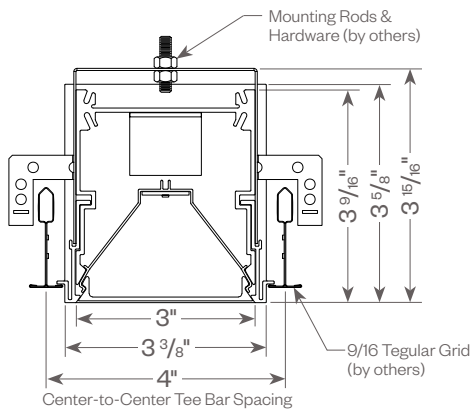
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TYPE:

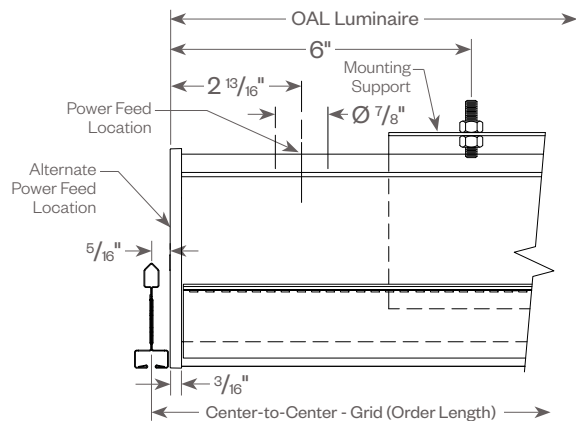
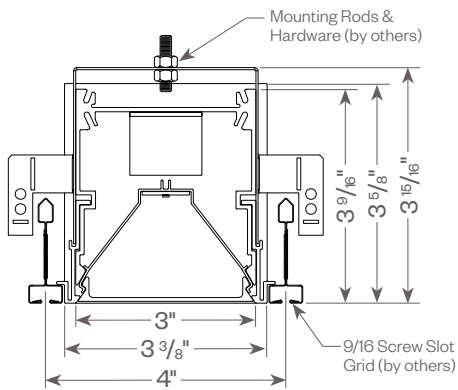
9/16 Tee Grid



9/16 Tegular



9/16 Screw Slot



Center-to-Center Tee Bar Spacing

Carisma 3"

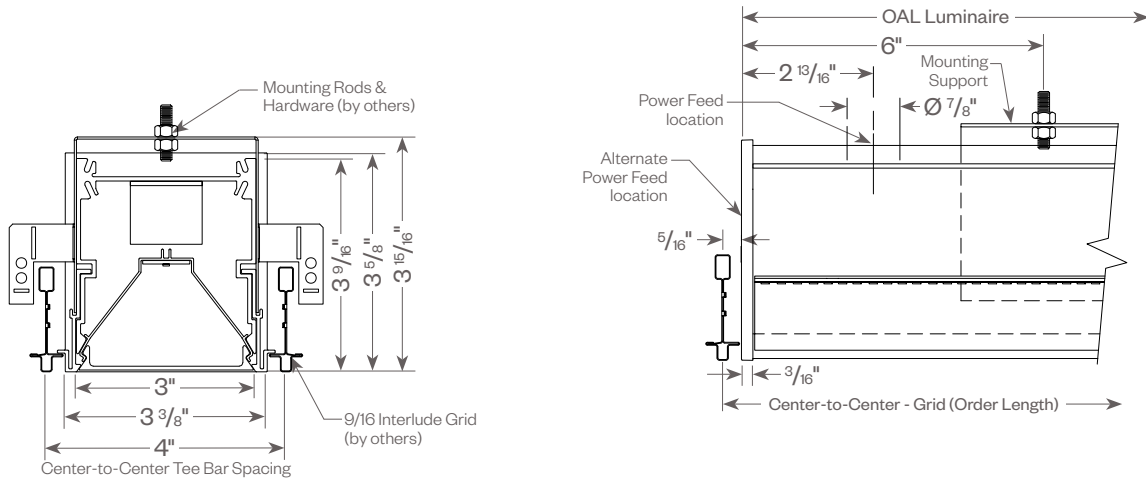
Recessed Linear LED



PROJECT:

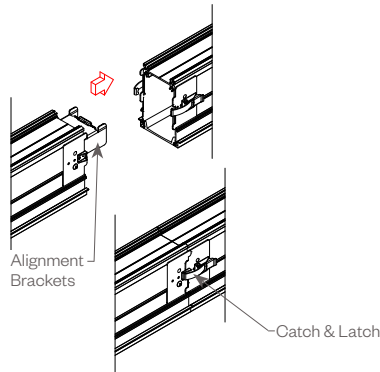
TYPE:

9/16 Interlude



TOOLLESS JOINING

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



OPTIONAL SENSOR/RF NODE:

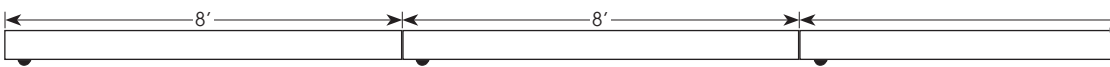
Amerlux® has partnered with control companies to create building environments that are safer and smarter than ever before. At the heart of our partnership is intelligent RF nodes and Smart Sensor, the most advanced digital wireless communication and sensors available today. Integrated into Amerlux products.

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

INDIVIDUAL (MIN 3' LENGTH)



RUNS



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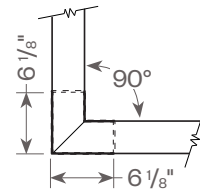
PROJECT:

TYPE:

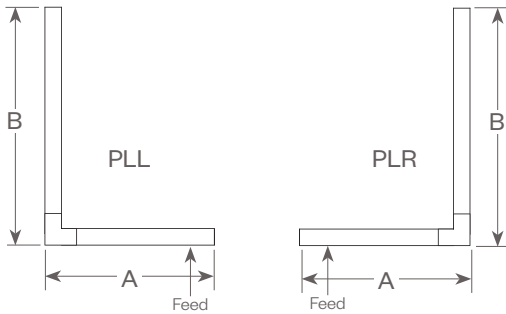
CARISMA 3" PATTERNS:

Standard Patterns

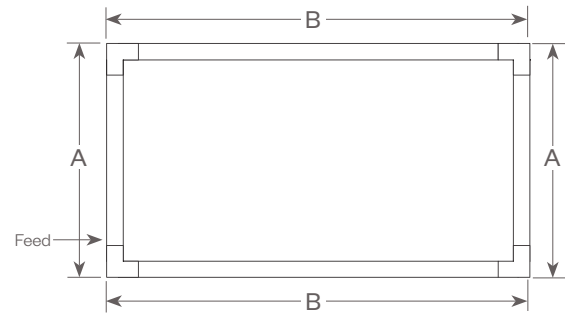
All corners are standard 90°, standard length legs.
 Use standard lengths: 4' to 8' in 1 foot increments.
 Continuous runs must be the same length in pairs for closed configuration.



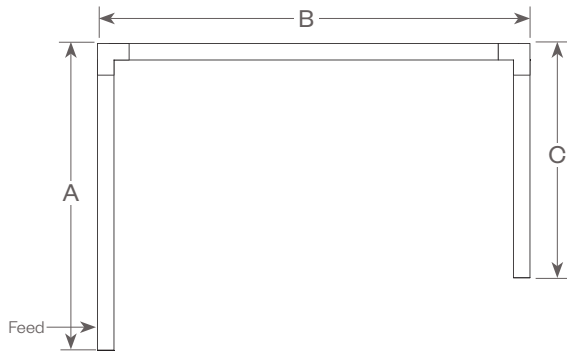
Carisma 2" Lens
Mitered Lens



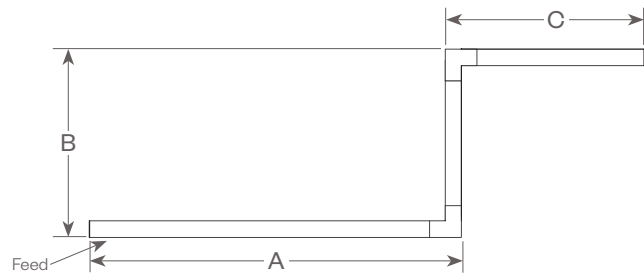
PLL - L Left, (2) straights + (1) 90° corner, leg right
PLR - L Right, (2) straights + (1) 90° corner, leg left
 Provide overall lengths: A' & B'
 Nomenclature: A-B-PLL A-B-PLR



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

Carisma 3"

Recessed Linear LED



PROJECT:

TYPE:

FIXTURE DATA:

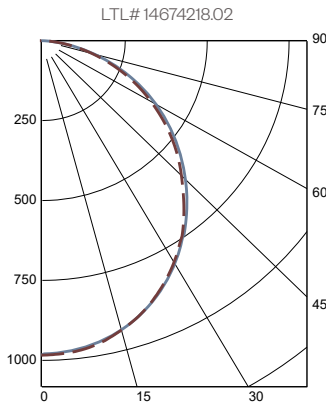
MULTIPLYING FACTORS: (Multiplying Factor is based on 3500K-80 120V IES file on website)

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

CCT-CRI:	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" RECESSED 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

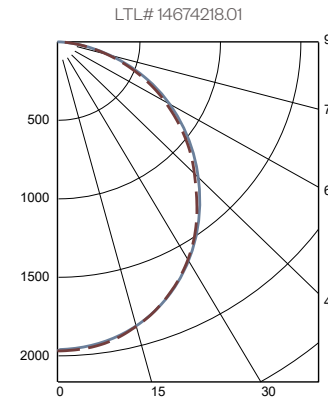
COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
ROR				
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	24

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

CARISMA 3" RECESSED 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	80			
RW	70	50	30	10
ROR				
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.

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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:

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

Compatible Dimmers*:

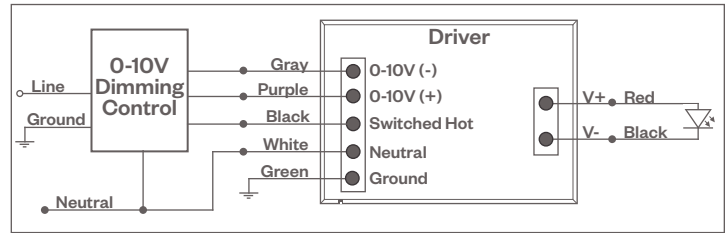
Wall Box

Lutron:	Wattstopper:	Leviton:
Diva - DVSTV	ADF-120277	Renoir II
Maestro - MS-Z101		
Nova-T - NTSTV-DV		

Center System

Lutron Grafikx Eye with GRX-TV1 Interface

0-10V Wiring Diagram



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*:

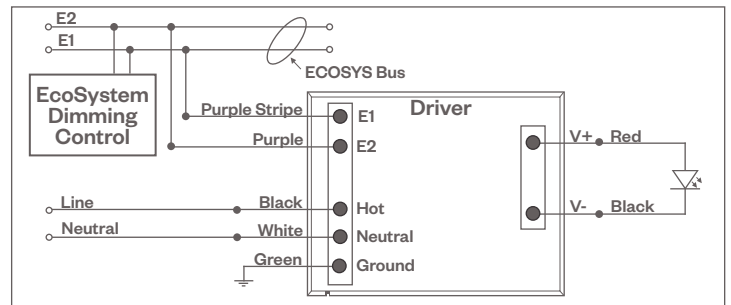
Lutron ECO System

Pow Pak Dimming Modules
 Energi Savr Node
 Grafik Eye QS/Homeworks
 QS Control Unit
 Quantum Hub
 Homeworks QS/My Room

Central System

Lutron EcoSystem compatible controls

Lutron 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.

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PROJECT:

TYPE:

DIMMING COMPATIBILITY:

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--- 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†:

Wall Box

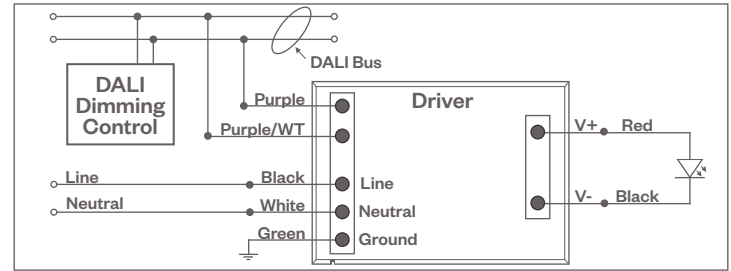
Leviton CD250 Controller

Center System

Dynalite

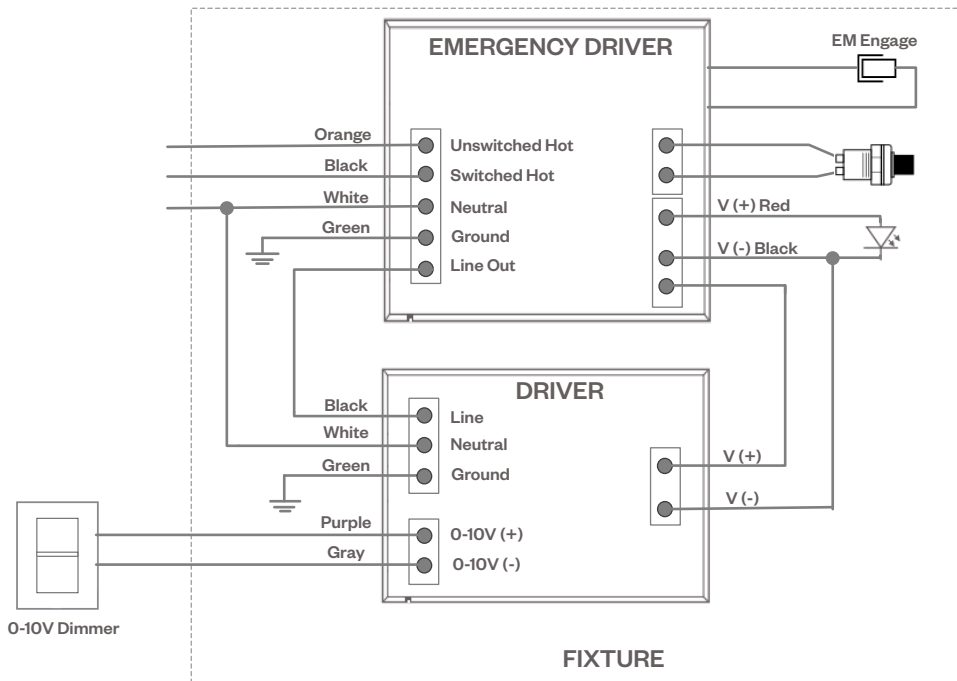
Fifth Light

DALI Wiring Diagram



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.