Carisma® Combo

Linear Direct Pendant with Track

PROJECT:	TYPE:

Features

The Carisma® Combo combines our linear 2" Carisma® pendants with track sections. Carisma® is 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.

CAR2-D-COMBO

Product Overview

Type:	Direct distribution with pendant 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:	0-10V, 1% dimming

Certifications

5 year limited warranty AMERLUX LED

Fixture Summary

Performance Data

Wattage per Foot	Lens	Delivered Lumens	LPW
5	P	2519	126.8
10	P	4755	122.8
5	A	2693	135.6
10	A	5408	128.6

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

Runs

Individual Runs: 2' - 8' *(specify in 1' increments)*.
Continuous Runs: > 8' *(specify to the nearest foot)*.

Carisma® Combo

Linear Direct Pendant with Track

amerlux

PROJECT:	TYPE:

Ordering Information

CAR2-D-COMBO-GES . _____ . _____ / _____ . _____ . _____ . _____ . _____ . 120/277 . 120 . _____ . _____

1 2 3 4 5 6 7 8 9 10 11

Example: 28' run with 2' track at beginning and end of run

CAR2-D-COMBO-GES . 28 . 8TP/8P/8P/4PT . ASW04D . 5 . 35 . HW . 120/277 . 120 . CON . 0-10V

1 Model

CAR2-D-COMBO-GES

2 Total Run Length

_____ *(min. 4ft, increments of 2ft)*

3 Run Builder

_____ / _____ *(section lengths must equal total run length)*

Combo Module with Linear Only:

Module Length	Lens
4 47.5"	**P** performance lens
6 71.25:	**A** asymmetric lens
8 95.0"	

Combo Module with Linear & Track:

Module Length	Track Position & Lens
4 47.5"	**PT** performance lens with 2' track at end
6 71.25:	**TP** performance lens with 2' track at beginning
8 95.0"	**AT** asymmetric lens with 2' tract at end
	TA asymmetric lens with 2' track at beginning
	TPT performance lens with 2' track at beginning and end *(6' & 8' lengths only)*
	TAT asymmetric lens with 2' track at beginning and end *(6' & 8' lengths only)*

Combo Module with Track Only:

Module Length	Track
4 47.5"	**T** track
6 71.25:	
8 95.0"	

Note: *Add* ***-EMB*** *for emergency battery pack or* ***-EMC*** *for emergency circuit. Applies to lensed Linear only. Examples:* ***6P-EMB*** *is a 6' performance lens only module with emergency battery pack.* ***8TP-EMB*** *is an 8' module with track and performance lens with emergency battery pack for the performance lens section.*
Note: P and A lens cannot be directly adjacent.

4 Mounting

Pendant Mount *(aircraft cable suspension)*

ASW04D through ceiling tile or gyp board, white, 4' (18/6, 12/3)
ASW10D through ceiling tile or gyp board, white, 10' (18/6, 12/3)
ASW20D through ceiling tile or gyp board, white, 20' (18/6, 12/3)
ASB04D through ceiling tile or gyp board, black, 4' (18/6, 12/3)
ASB10D through ceiling tile or gyp board, black, 10' (18/6, 12/3)
ASB20D through ceiling tile or gyp board, black, 20' (18/6, 12/3)

5 Wattage *(per foot)*

5 5W/ft
10 10W/ft

6 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+

7 Finish

HW high reflectance matte white
BT black texture
ST silver texture

8 Linear Voltage

120/277

9 Track Voltage

120

10 Configuration

IND use IND if row consists of only one single Module *(e.g. 4PT)*

CON use CON if row consists of more than one single Module *(e.g. 6P/4TA/6TP)*

11 Drivers/Controls

0-10V* 1% electronic dimming , multi-volt 120-277VAC constant current driver *(standard)*
**** For linear ambient sections only.***

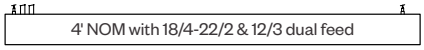
NOTE: Each run must include a combination of track sections and lit linear sections.

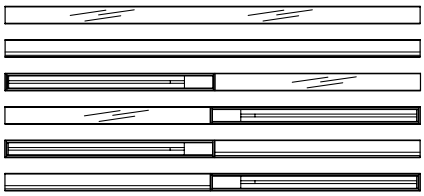
Carisma® Combo

Linear Direct Pendant with Track

PROJECT:	TYPE:

Modules





4P = 4' with Performance Lens

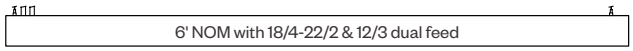
4A = 4' with Asymmetric Lens

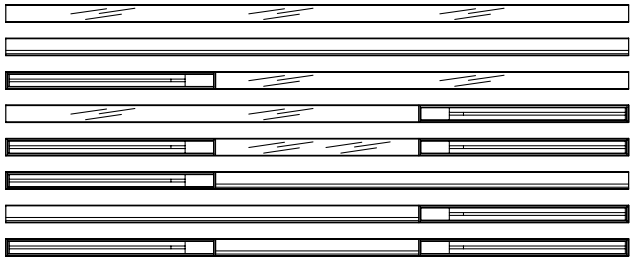
4TP = 4' with 2' Track at Beginning & 2' Performance Lens at End

4PT = 4' with 2' Performance Lens at Beginning & 2' Track at End

4TA = 4' with 2' Track at Beginning & 2' Asymmetric Lens at End

4AT = 4' with 2' Asymmetric Lens at Beginning & 2' Track at End





6P = 6' with Performance Lens

6A = 6' with Asymmetric Lens

6TP = 6' with 2' Track at Beginning & 4' Performance Lens at End

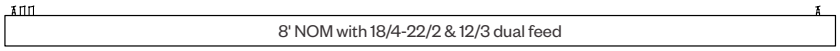
6PT = 6' with 4' Performance Lens at Beginning & 2' Track at End

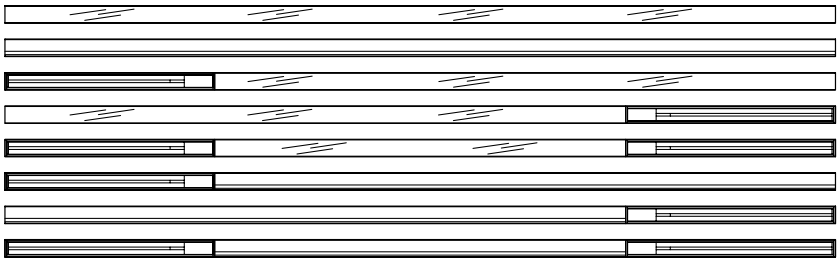
6TPT = 6' with 2' Track at Beginning & 2' Track at End & 2' Performance Lens

6TA = 6' with 2' Track at Beginning & 4' Asymmetric Lens at End

6AT = 6' with 4' Asymmetric Lens at Beginning & 2' Track at End

6TAT = 6' with 2' Track at Beginning & 2' Track at End & 2' Asymmetric Lens





8P = 8' with Performance Lens

8A = 8' with Asymmetric Lens

8TP = 8' with 2' Track at Beginning & 6' Performance Lens at End

8PT = 8' with 6' Performance Lens at Beginning & 2' Track at End

8TPT = 8' with 2' Track at Beginning & 2' Track at End & 4' Perf Lens

8TA = 8' with 2' Track at Beginning & 6' Asymmetric Lens at End

8AT = 8' with 6' Asymmetric Lens at Beginning & 2' Track at End

8TAT = 8' with 2' Track at Beginning & 2' Track at End & 4' Asy Lens

Carisma® Combo

Linear Direct Pendant with Track

PROJECT:	TYPE:

Specifications

Construction

Extruded aluminum housing and reflector.
Die-cast end caps match fixture body finish.
Dual wire way wiring chasis, 1 circuit GES track *(Track Heads sold separately)*

Optical

All lenses are snap-in, extruded acrylic, with a maximum length of 8'.
Amerlux's proprietary acrylic lens provide excellent transmission while effectively concealing source image.
P - Performance Lens provides high efficiency with controlled lens surface brightness.
A - Asymmetric Lens

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

LED = Line 1, Track = Line 2
Wiring: Individual and "Beginning of Run" *(BOR)* fixtures are prewired with power cord. All configurations have quick connect power harnesses for row connections.
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.

Finish

All painted surfaces are premium powder coated baked on for maximum durability and color stability.
HW - High reflective matte White
BT - Black Texture
ST - Silver Texture
For special paint colors supply RAL and/or actual paint chip for factory consultation.

Configurations/Lengths

IND - Individual fixtures are made of single standard lengths of 2ft to 8ft *(in 2ft 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 2ft 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.

Mounting

The Carisma® Direct is intended for pendant mounting.
Pendant Mount-ASWxxD - Direct pendant mounted in center of ceiling tile or gypsum board ceiling *(standard)* i.e. ASWxxD.
Cable is stranded stainless steel wire. All fittings are protected against rust and corrosion. Canopies are 5" x 1/4" die formed painted steel. Adjustment mechanism allows for infinite height adjustment. Amerlux recommends the required feed and non-feed suspensions based upon length and electrical options. Options include: color of canopy and power cord *(black or white)*, length 4', 10' or 20', and mounting condition, in center of ceiling tile and in gypsum board ceiling *(standard)* i.e. ASWxxD.

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)*, 1.66W/ft *(6ft fixture)*, 1.25W/ft *(8ft fixture)*.

Certifications

Approved to UL standards for damp locations as tested by CSA.
Intended for indoor use only.

Warranty

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

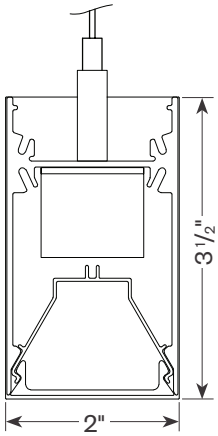
Carisma® Combo

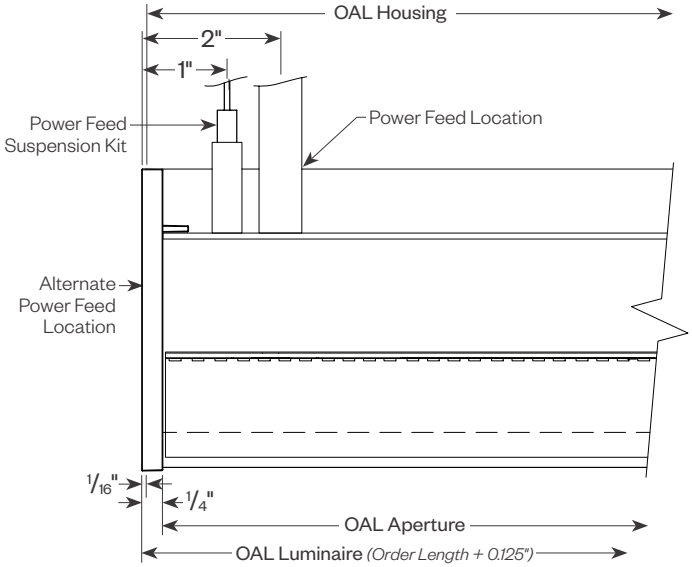
Linear Direct Pendant with Track

PROJECT:	TYPE:

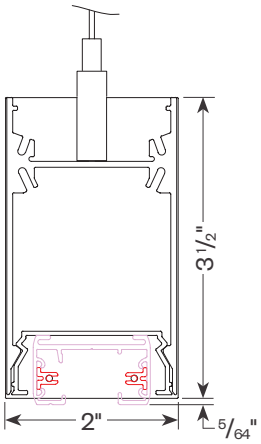
Product Details

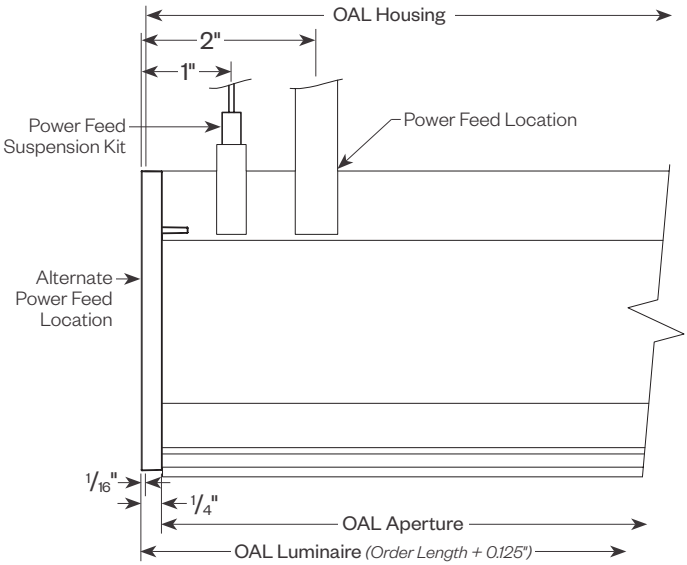
Pendant





Track Profile





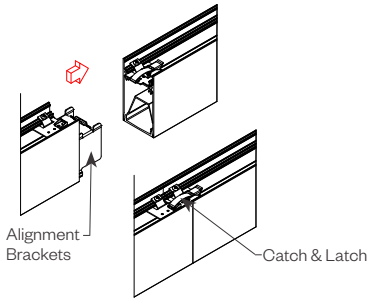
Carisma® Combo

Linear Direct Pendant with Track

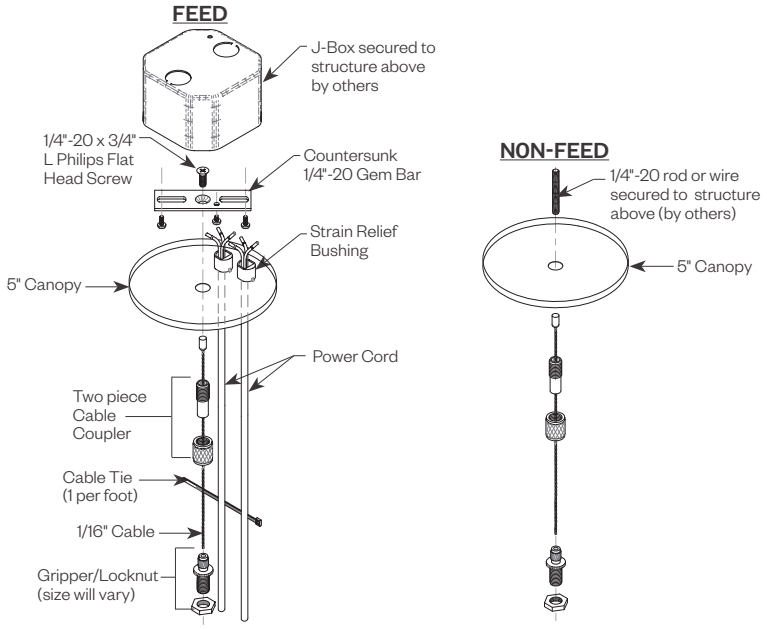
PROJECT:	TYPE:

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.



Cable Kit Suspension - Ceiling or Gypsum Board



Cat#	Length	Cord/Canopy	Application
ASW04D	4'	white/white	ceiling tile/gypsum
ASW10D	10'	white/white	ceiling tile/gypsum
ASW20D	20'	white/white	ceiling tile/gypsum
ASB04D	4'	black/black	ceiling tile/gypsum
ASB10D	10'	black/black	ceiling tile/gypsum
ASB20D	20'	black/black	ceiling tile/gypsum

Carisma® Combo

Linear Direct Pendant with Track

PROJECT:	TYPE:

Performance Data

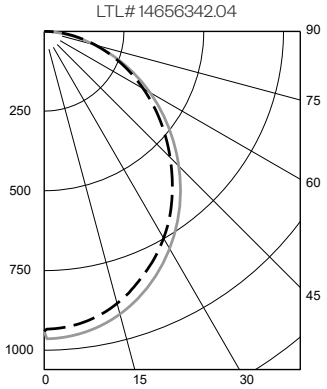
Multiplying Factors: *(Multiplying Factor is based on 3500K-80 120V IES file on website)*

Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.59	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 2" DIRECT PERFORMANCE LENS 5W 3500K 4FT
Total Watts: 20
Total Lumens: 2,519
Source: 192 White LED's

LTL# 14656342.04



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1154	45.8
0-60	1990	79.0
0-90	2519	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 126.8 lm/W

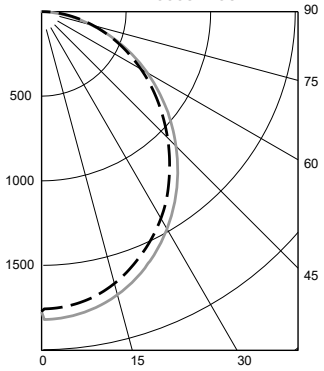
COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
RCR				
0	119	119	119	119
1	109	104	100	96
2	99	91	84	78
3	90	80	71	65
4	83	71	62	55
5	76	63	54	48
6	70	57	48	42
7	65	52	43	37
8	61	47	39	33
9	57	43	35	30
10	53	40	32	27

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

CARISMA 2" DIRECT PERFORMANCE LENS 10W 3500K 4FT
Total Watts: 39
Total Lumens: 4,755
Source: 192 White LED's

LTL# 14656342.03



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	2177	45.8
0-60	3754	78.9
0-90	4755	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 122.8 lm/W

COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
RCR				
0	119	119	119	119
1	109	104	100	96
2	99	91	84	78
3	90	80	71	65
4	83	71	62	55
5	76	63	54	48
6	70	57	48	42
7	65	52	43	37
8	61	47	39	33
9	57	43	35	30
10	53	40	32	27

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

Carisma® Combo

Linear Direct Pendant with Track

PROJECT:	TYPE:

Performance Data *(continued)*

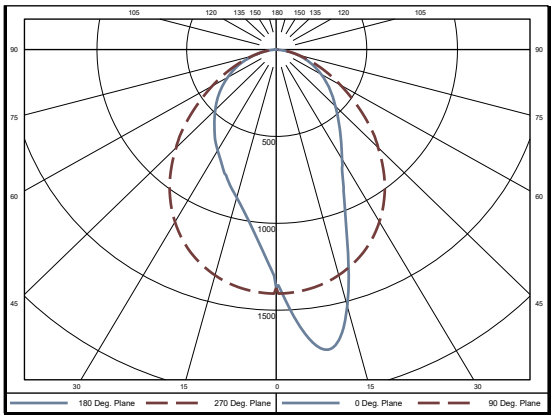
Multiplying Factors: *(Multiplying Factor is based on 3500K-80 120V IES file on website)*

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:	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 2" DIRECT ASYMMETRIC LENS 5W 3500K 4FT
Total Watts: 20
Total Lumens: 2693
Source: 192 White LED's

LTL# 15335267.01



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1446	53.7
0-60	2259	83.9
0-90	2692	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 135.6 lm/W

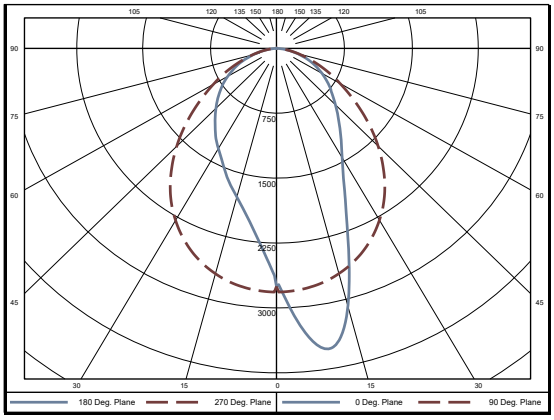
COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
RCR				
0	119	119	119	119
1	110	105	102	98
2	101	93	87	82
3	93	83	75	69
4	86	74	66	60
5	79	67	58	53
6	74	61	53	47
7	69	56	48	42
8	64	51	43	38
9	60	48	40	34
10	57	44	37	32

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

CARISMA 2" DIRECT ASYMMETRIC LENS 10W 3500K 4FT
Total Watts: 42
Total Lumens: 5408
Source: 192 White LED's

LTL# 15335267.02



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	2906	53.7
0-60	4535	83.9
0-90	5408	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 128.6 lm/W

COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
RCR				
0	119	119	119	119
1	110	105	102	98
2	101	93	87	82
3	93	83	75	69
4	86	74	66	60
5	79	67	58	53
6	74	61	53	47
7	69	56	48	42
8	64	51	43	38
9	60	48	40	34
10	57	44	37	32

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

Carisma® Combo

Linear Direct Pendant with Track

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 ---

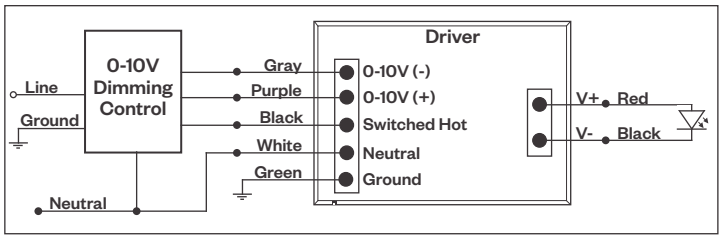
0-10V - DIMMING *(Standard)*

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!**

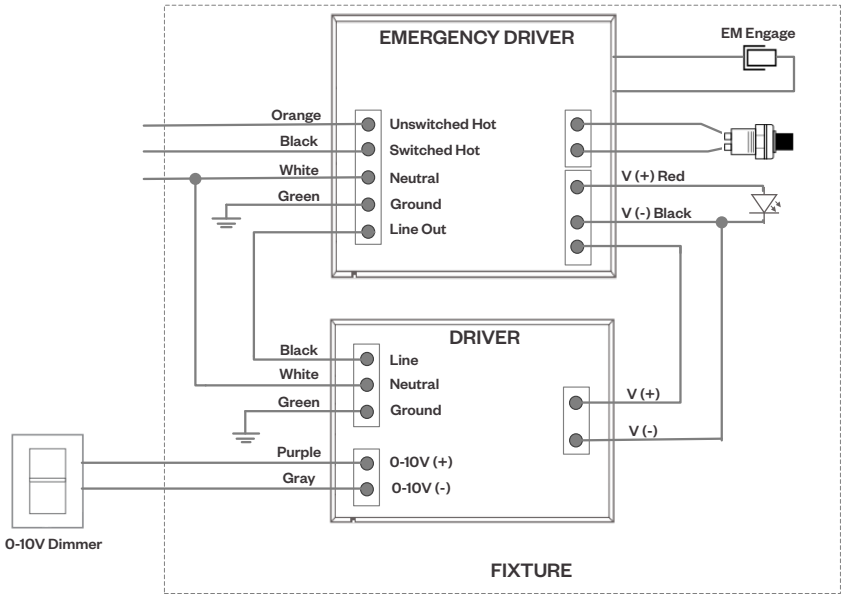
0-10V Wiring Diagram



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			

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.