

Linea® 3.5"

Linear Indirect LED



Features

Linea® 3.5" Indirect LED ambient system is a small-scale 3.5" extruded profile that provides well-controlled ambient lighting. Engineered around the latest LED, in a choice of 5W/ft or 10W/ft LED boards. Excellent for any general/ambient lighting application in commercial spaces.

Product Overview

Type:	Cable Suspended or Wall Mounted Indirect	
Wattage:	5W/ft, 10W/ft (other wattages available see p2)	
Color Temp:	2700K, 3000K, 3500K, 4000K; Tunable White (2700K-5700K)	
CRI:	83 or 90+ typ. (2700K, 3000K, 3500K, 4000K) 90+ (Tunable White)	
Dimming (wired):	<u>Static White</u> 0-10V, 1% dimming (standard) Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black DALI dimming, 1% dim	<u>Tunable White</u> 0-10V TW, 1% dimming DALI DT8, 1% digital dimming
Dimming (wireless):	Enlighted Sensor Lutron Athena (integral wireless RF node)	Enlighted Sensor TW Lutron Athena TW (integral wireless RF node)

PROJECT:

TYPE:

Fixture Summary *(see following pages for more information)*

Performance Chart (4' Fixture)

Nominal Wattage/Foot	Delivered Lumens	LPW	Color Temp-CRI
5	2644	132.2	3500K-83
10	4989	138.3	3500K-83

*Data is based on 3500K-83 IES files available on website
Data is based on 4' fixture with Upper Clear lens*

Runs

Individual Runs: 2' - 8' *(whole foot standard)*

Continuous Runs: Available *(whole foot standard)*

Custom: Made to measure available (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	18	0.15	36.3	0.30
	277V	18	0.06	36.3	0.13
10	120V	36	0.30	72.2	0.60
	277V	36	0.13	72.2	0.26

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	Yes

** Submit drawing, consult factory*



Linea[®] 3.5" Indirect

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PROJECT:

TYPE:

Specifications

Application

Open office plan, conference rooms, corridors or any indoor space where even, indirect ambient lighting is desired.

Construction

One piece extruded aluminum housing. Die-cast End Plates match fixture body finish. Die-formed, cold-rolled steel internal components are protected against rust and corrosion.

Optical

Extruded acrylic lens with a maximum length of 8'. A minimum of 18" distance between ceiling plane and top of fixture suggested.

UC - Upper Clear lens cover (standard)

BAT - Batwing upright lens spreads light directly above fixture.

LED

Amerlux's boards and patented connector design with brand name LEDs enables Amerlux fixtures to have excellent thermal management and offer a 5 year warranty. 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.

Static White	Tunable White
CCT: 2700K, 3000K, 3500K, 4000K	2700K-5700K
CRI: 83 or 90+ typical	90+ (92 typ)
R9: 16 @ CRI 83; >50 @ CRI 90+	>50

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

Electrical

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 4'). 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 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 for additional circuiting. Not available for individual (IND) configuration.

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 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 with diagonally driven screws through a joining bracket. 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.

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. When 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 6 for layouts.

PC - Custom Patterns may use standard lengths, Made To Measure, 90° or other corners (some limitations). Please provide drawing and consult factory.

Mounting

The Linea 3.5 Indirect is intended to be pendant or wall mounted in continuous rows. For indirect lighting Amerlux suggests 18" min from top of fixture to ceiling. Standard or custom patterns available.

LIN3.5I-A16...ASW10 - Indirect pendant installed in center of ceiling tile or gypsum board ceiling, (standard) i.e. ASW10. Or if canopy is installed on a grid Tee runner add, **T** i.e. ASW10T

Cable Suspension: 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 10' or 20', and mounting condition, in center of ceiling tile and in gypsum board ceiling (standard) i.e. ASW10. Or if canopy is installed on a grid Tee runner add, **T** i.e. ASW10T

LIN3.5I-A16...WMM - Indirect Wall Mounted using steel cleat bracket attached to fixture housing and wall bracket with set screws. Two bracket assemblies are used for each length under 8'. A third center bracket may be recommended. J box required at feed locations.

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.

Linea[®] 3.5" Indirect

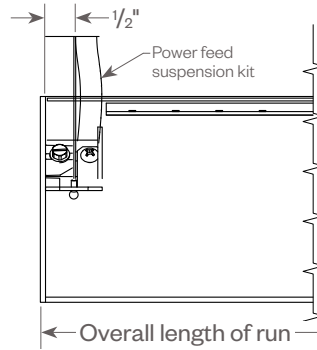
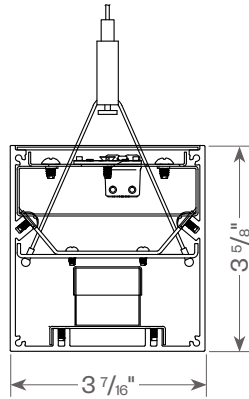
Linear Indirect LED



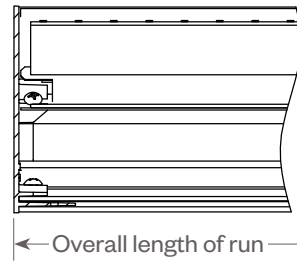
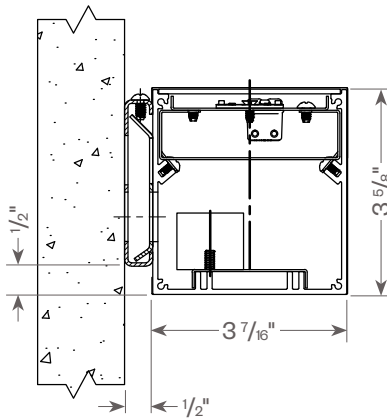
PROJECT:

TYPE:

LINEA 3.5" INDIRECT

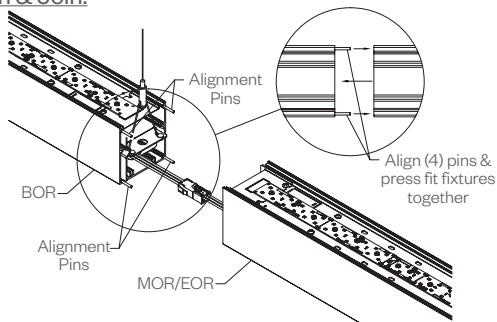


LINEA 3.5" INDIRECT WALL MOUNT



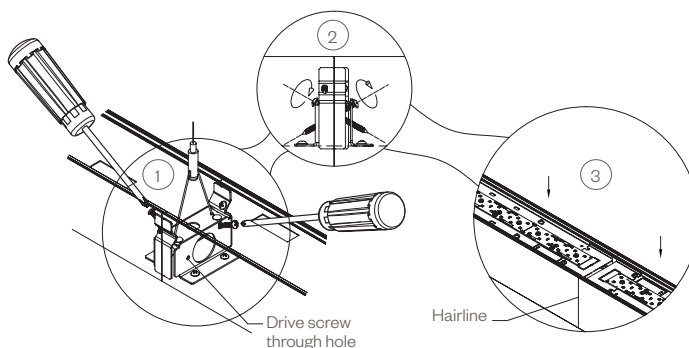
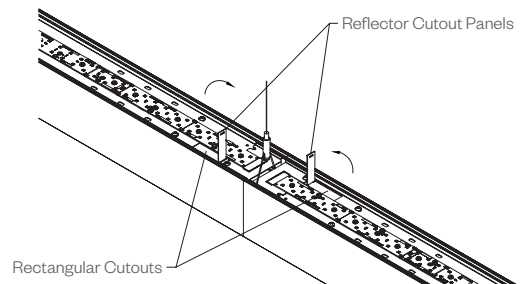
JOINING THE HOUSINGS

Align & Join:



Secure Fixtures/Joint:

Bend up reflector cutout panels as shown to expose joining hardware



1. Through cutouts in reflectors, locate screws installed loosely in joining brackets.
2. Drive combo screw diagonally into hole in opposite hanger bracket. Drive second screw diagonally into hole in opposite hanger bracket. Tighten both screws to pull together & secure fixtures.
3. Reband down reflector cutout panels.

Linea[®] 3.5" Indirect

Linear Indirect LED

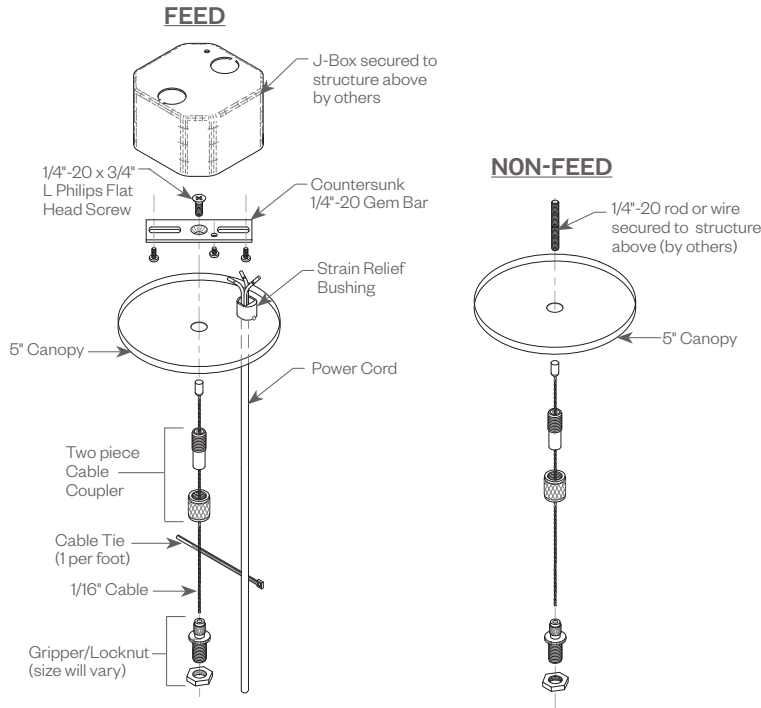


PROJECT:

TYPE:

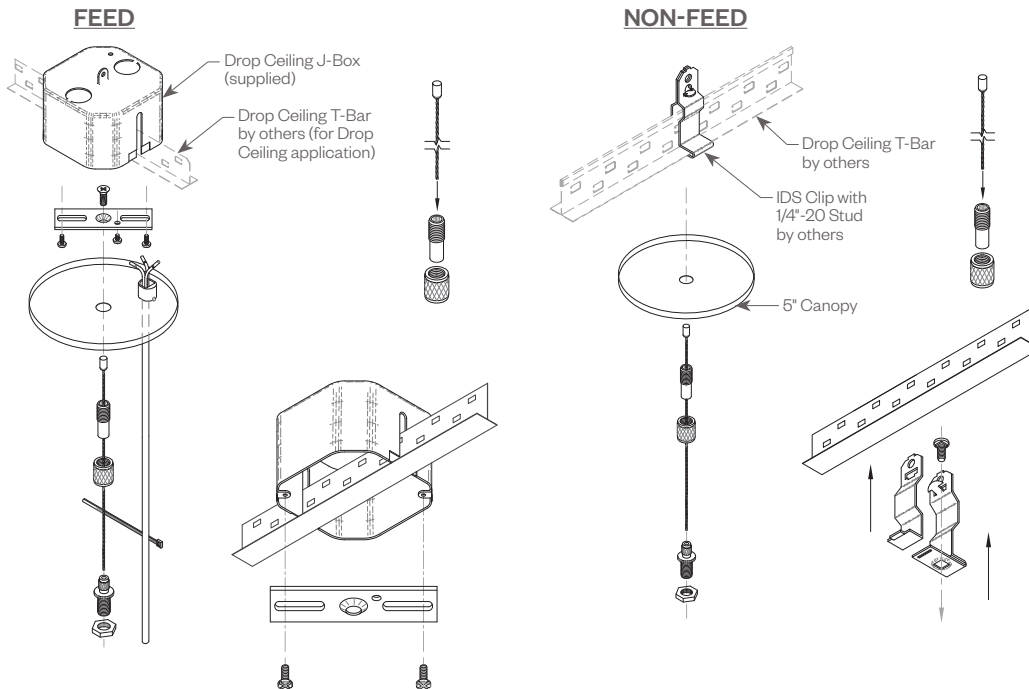
CABLE KIT SUSPENSION OPTIONS:

CEILING OR GYPSUM BOARD (ASW10, ASW20, ASB10, ASB20)



Cat#	Length	Cord/Canopy	Application
ASW10	10'	white/white	ceiling tile/gypsum
ASW20	20'	white/white	ceiling tile/gypsum
ASB10	10'	black/black	ceiling tile/gypsum
ASB20	20'	black/black	ceiling tile/gypsum
ASW10T	10'	white/white	ceiling tee
ASW20T	20'	white/white	ceiling tee
ASB10T	10'	black/black	ceiling tee
ASB20T	20'	black/black	ceiling tee

TEE GRID OR SCREW SLOT (ASW10T, ASW20T, ASB10T, ASB20T)



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PROJECT:

TYPE:

OPTIONAL SENSOR/RF NODE:

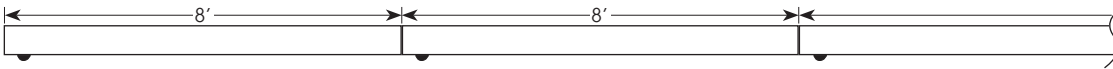
Amerlux[®] has partnered with control companies to create building environments that are safer, and smarter, than ever before. At the heart of our partnership is intelligent RF nodes and Smart Sensor, the most advanced digital wireless communication and sensors available today. Integrated into Amerlux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

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

INDIVIDUAL (MIN 3' LENGTH)



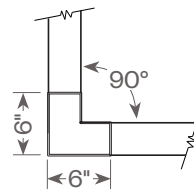
RUNS



LINEA 3.5" PATTERNS:

Standard Patterns

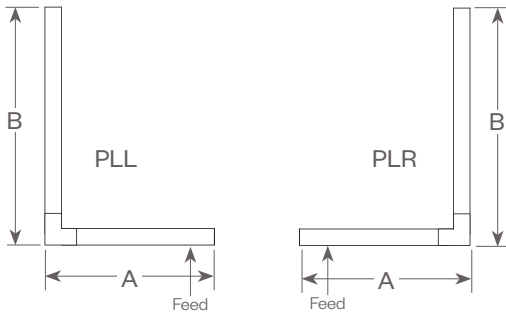
- All corners are standard 90°, standard length legs.
- Use standard lengths: 4' min to 8' in 1 foot increments.
- Continuous runs must be the same length in pairs for closed configuration.



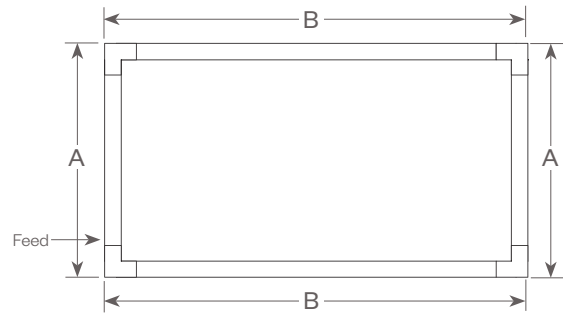
Linea 3.5 Indirect
Solid, not lit

Custom Patterns

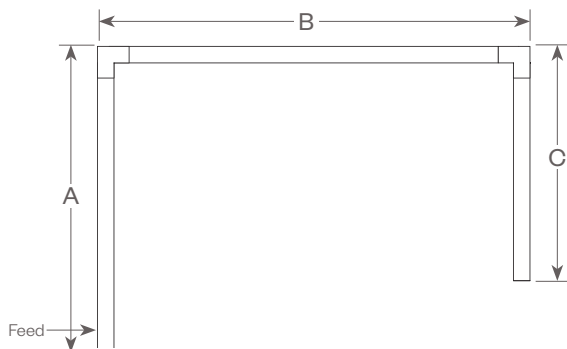
- Please provide drawings of your configuration.
- Made to Measure: +/- 1/8", consult factory.
- PC - custom pattern, please provide drawings and consult factory



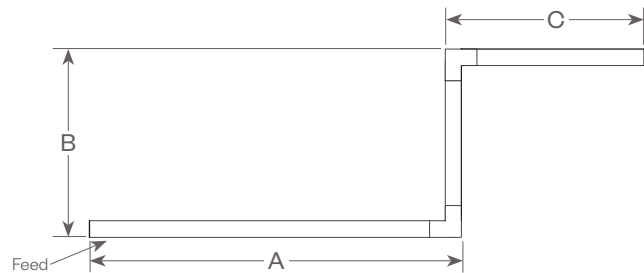
PLL - L Left, (2) straights + (1) 90° corner, leg right
PLR - L Right, (2) straights + (1) 90° corner, leg left
 Provide overall lengths: A' & B'
 Nomenclature: A-B-PLL A-B-PLR



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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FIXTURE DATA:

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

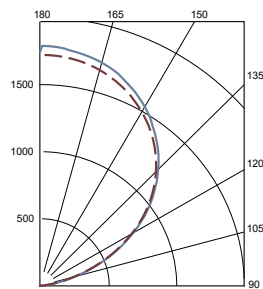
Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.31	0.42	0.53	0.63	0.72	0.81	0.90	1.0

CCT Factors:					TW9
CRI	2700K	3000K	3500K	4000K	(@3500K)
83	0.92	0.97	1.0	1.02	-
90	0.81	0.84	0.86	0.89	0.86

LINEA 3.5" INDIRECT UPPER CLEAR LENS 10W 3500K 4FT

Total Watts: 36
Total Lumens: 4989
Source: 120 White LED's

LTL# 14626239.20



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	0	0.0
0-60	0	0.0
0-90	0	0.0
90-180	4989	100.0

Luminaire Efficacy = 138.3 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

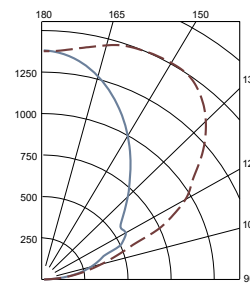
RC	80			
RW	70	50	30	10
RCR				
0	95	95	95	95
1	87	83	79	76
2	79	72	66	62
3	72	63	57	51
4	65	56	48	43
5	60	49	42	36
6	55	44	36	31
7	50	39	32	27
8	47	35	28	23
9	43	32	25	20
10	40	29	22	18

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

LINEA 3.5" INDIRECT BATWING 10W 3500K 4FT

Total Watts: 36
Total Lumens: 4653
Source: 120 White LED's

LTL# 14626239.21A



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	0	0.0
0-60	0	0.0
0-90	0	0.0
90-180	4653	100.0

Luminaire Efficacy = 129.0 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	80			
RW	70	50	30	10
RCR				
0	95	95	95	95
1	87	83	79	76
2	79	72	66	62
3	72	63	57	51
4	65	56	48	43
5	60	49	42	36
6	55	44	36	31
7	50	39	32	27
8	47	35	28	23
9	43	32	25	20
10	40	29	22	18

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

Linea[®] 3.5" Indirect

Linear Indirect LED



PROJECT:

TYPE:

STATIC WHITE - DIMMING COMPATIBILITY:

Amerlux[®] Linea 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 ---

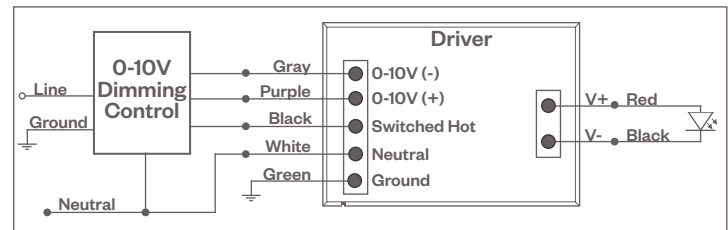
0-10V - DIMMING (Standard)

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

Lutron:

Diva - DVSTV
Maestro - MS-Z101
Nova-T - NTSTV-DV

Wattstopper:

ADF-120277

Leviton:

Renoir II

Center System

Lutron Grafikx Eye with GRX-TV1 Interface

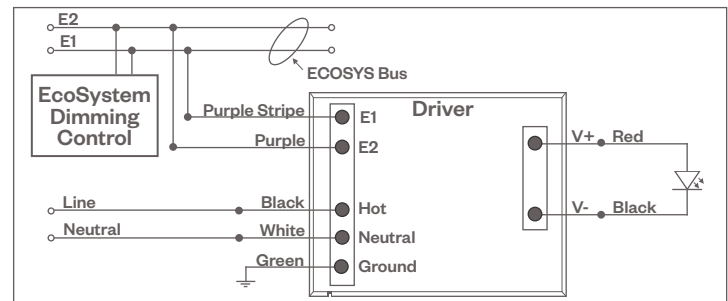
LUTRON LDE1 DIMMING

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!

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



Compatible Dimmers*:

Lutron ECO System

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

Central System

Lutron EcoSystem compatible controls

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:

STATIC WHITE - DIMMING COMPATIBILITY:

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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†:

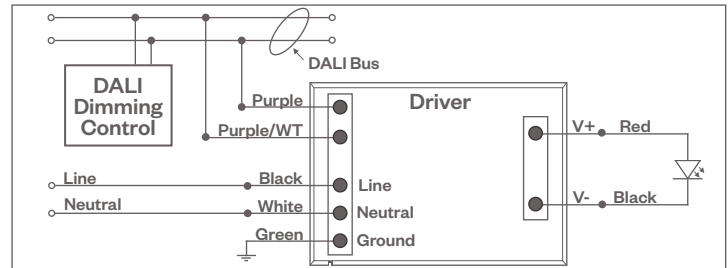
Wall Box

Leviton CD250 Controller

Center System

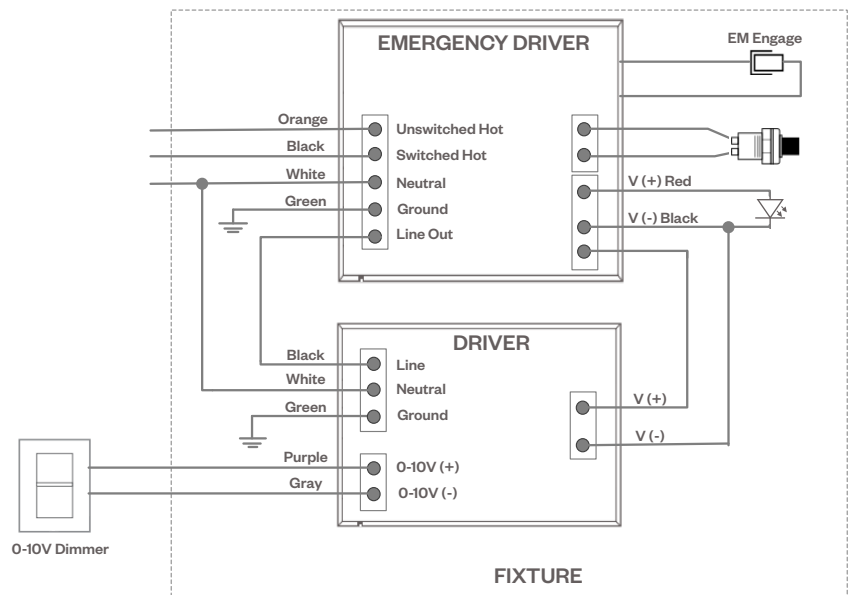
Dynalite
Fifth Light

DALI Wiring Diagram



EMERGENCY FIXTURE WITH BUILT-IN BATTERY PACK (EMB) WIRING:

Note: EMB not available on lengths under 4'.



Notes:

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Linea[®] 3.5" Indirect

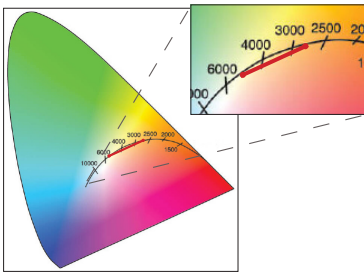
Linear Indirect LED



PROJECT:

TYPE:

TUNABLE WHITE



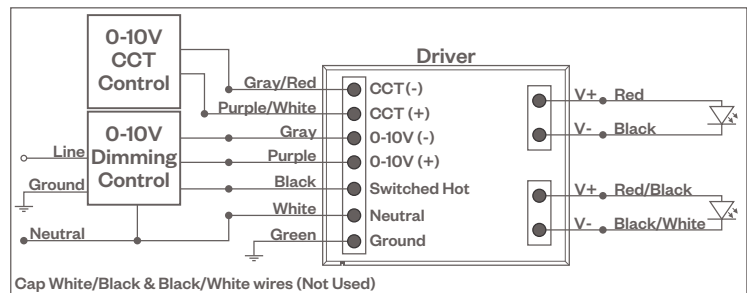
Tunable White range from 2700K-5700K, 90 CRI.
See wiring diagrams below.

TUNABLE WHITE - DIMMING COMPATIBILITY:

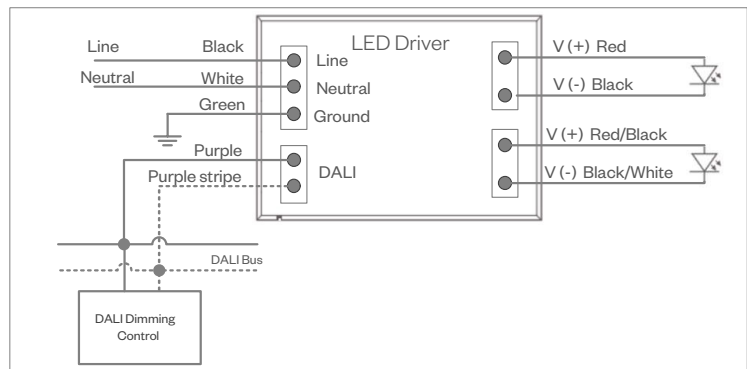
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0-10V Wiring Diagram



DALI DT8 Wiring Diagram



Notes:

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