

Linea® 3.5"

Linear Indirect

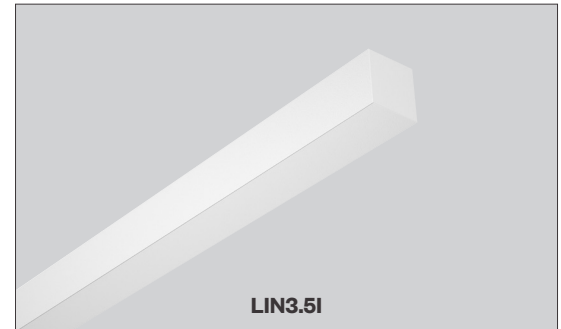


PROJECT:

TYPE:

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 Linear, 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>	<u>Tunable White</u>
	0-10V, 1% dimming (standard) Lutron LDE1 Hi-lume® 1% Dim Soft-On/Fade-to-Black DALI dimming, 1% dim	0-10V TW, 1% dimming DALI DT8, 1% digital dimming
Dimming (wireless):	Lutron Athena (integral wireless RF node) BubblyNet Bluetooth	Lutron Athena TW (integral wireless RF node)

Certifications



Fixture Summary

Performance Data

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 120V 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 lengths available (nearest 1/8" of field dimensions).

Requires approval drawings. Added cost & lead time.

Electrical Data

Wattage per Foot	Voltage	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

					Wall to Ceiling	Custom*
Yes	Yes	Yes	Yes	Yes	No	Yes

* Submit drawing, consult factory.

PROJECT:

TYPE:

Ordering Information

LIN3.5I-A16

120/277

1	2	3	4	5	6	7	8	9	10	11
1	Model	2	Optics	3	Mounting	4	Wattage (per foot)			
	LIN3.5I-A16*	BAT batwing uplight (standard) UC upper clear lens cover		Pendant Mount (aircraft cable suspension) ASW04 through ceiling tile or gyp board, white, 4* ASW10 through ceiling tile or gyp board, white, 10' ASW20 through ceiling tile or gyp board, white, 20' ASB04 through ceiling tile or gyp board, black, 4* ASB10 through ceiling tile or gyp board, black, 10' ASB20 through ceiling tile or gyp board, black, 20' ASW04T over ceiling tee, white, 4* ASW10T over ceiling tee, white, 10' ASW20T over ceiling tee, white, 20' ASB04T over ceiling tee, black, 4* ASB10T over ceiling tee, black, 10' ASB20T over ceiling tee, black, 20' * 4' (xxx04) is standard length, other lengths are additional charge	Wall Mount WM wall mount	Standard 5 5W/ft 10 10W/ft Optional 3* 3W/ft 4* 4W/ft 6 6W/ft 7 7W/ft 8 8W/ft 9 9W/ft * 4' min. length required				
5	Color Temp	6	Finish	7	Voltage	8	Length			
	Static White 27 2700K-83 279 2700K-90+ 30 3000K-83 309 3000K-90+ 35 3500K-83 359 3500K-90+ 40 4000K-83 409 4000K-90+ Tunable White TW9-2757 tunable white, 90CRI (2700K-5700K)	HW high reflectance matte white BT black texture ST silver texture For other RAL color, consult factory		120/277		X Length A - all patterns - IND - CON - CUS	X Length B - all patterns - PR (2 lengths of 2)	X Length C - PU - PZ		
9	Configuration	10	Drivers/Controls							
	IND ¹ individual fixture, 2' to 8' in 1' increments CON continuous run > than 8', specify to nearest foot CUS custom made to measure, +/- 1/8" of customer supplied 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 For custom patterns, submit an EDR on amerlux.com.	Wired - Static White 0-10V 1% analogue dimming, 120-277VAC, dim to off when selected with wireless dimming control HILUME-H-ECO Lutron LDE1 Hi-lume® 1% dim Soft-On/Fade-to-Black DALI DALI dimming 120-277VAC, 1% dim Wired - Tunable White 0-10V-TW 1% dimming, multi-volt (120V-277V) constant current DALI-DT8 1% digital dimming, OCT control per DALI DT8 (120V-277V) constant current Wireless - Static White 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 AWN-R-OCC-WH-SR Lutron Athena wireless node, Occupancy & Daylight sensor, white, D4i/DALI-2 AWN-R-OCC-BL-SR Lutron Athena wireless node, Occupancy & Daylight sensor, black, D4i/DALI-2 AWN-R-OCC-WH-010 Lutron Athena wireless node, Occupancy & Daylight sensor, white, 0-10V AWN-R-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 Wireless - Tunable White AWN-R-WH-SR-TW Lutron Athena wireless node, RF only, white, D4i/DALI-2 AWN-R-BL-SR-TW Lutron Athena wireless node, RF only, black, D4i/DALI-2 AWN-R-OCC-WH-SR-TW Lutron Athena wireless node, Occupancy & Daylight sensor, white, D4i/DALI-2 AWN-R-OCC-BL-SR-TW Lutron Athena wireless node, Occupancy & Daylight sensor, black, D4i/DALI-2								
11	Options/Accessories									
	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')									

* The "A" refers to the sequential revision in a year and "XX" refers to the year of update. Updates coincide with improved performance while not changing the overall fixture aesthetic and are reflected in the published performance data. Please contact your Amerlux representative for explanations of changes.

¹ Lengths less than 4' may have restrictions based upon wattage, lengths, drivers or other options.

² Not available with IND (individual) configuration.

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.

BAT - Batwing uplight lens (*standard*) spreads light directly above fixture.

UC - Upper Clear lens cover

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 using alignment pins and brackets. 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.

For custom patterns, submit EDR on amerlux.com

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...WM - 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.

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). 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

Warranty

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

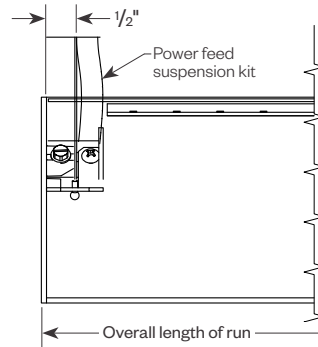
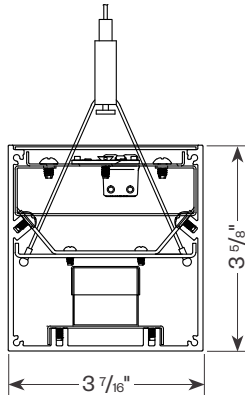


PROJECT:

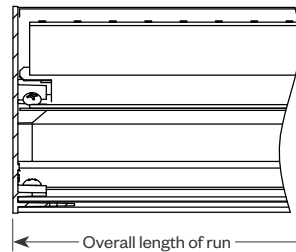
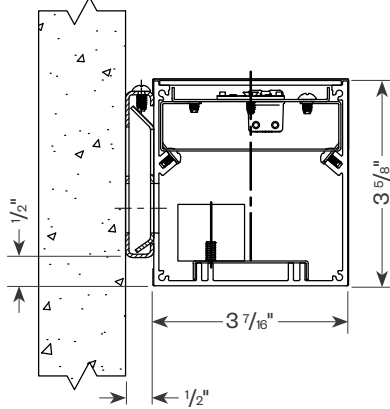
TYPE:

Product Details

Pendant

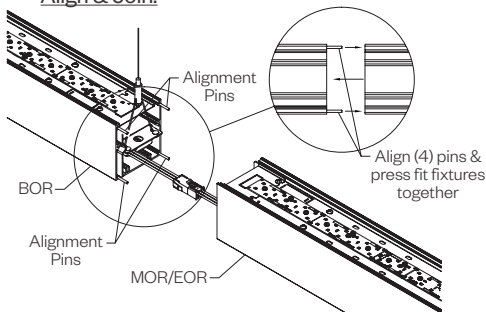


Wall Mount



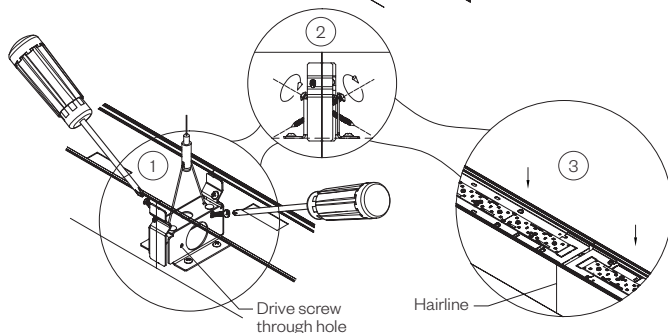
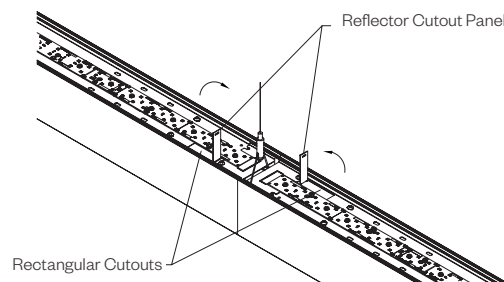
Joining the Housings

Align & Join:



Secure Fixtures/Join:

Bend up reflector cutout panels as shown to expose joining hardware



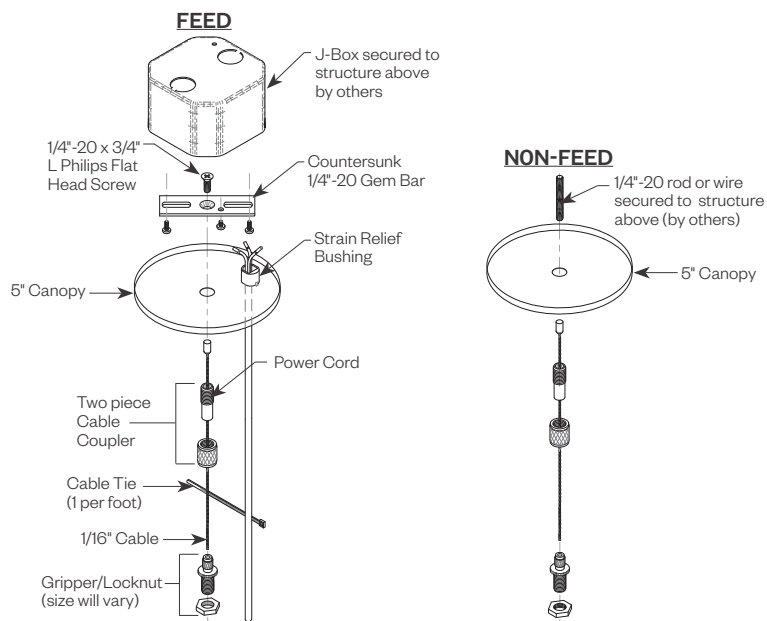
1. Through cutouts in reflectors, locate screws installed loosely in joining brackets.
2. Drive combo screw diagonally into hole in opposite hanger bracket. Drive second screw diagonally into hole in opposite hanger bracket. Tighten both screws to pull together & secure fixtures.
3. Re-bend down reflector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



PROJECT:

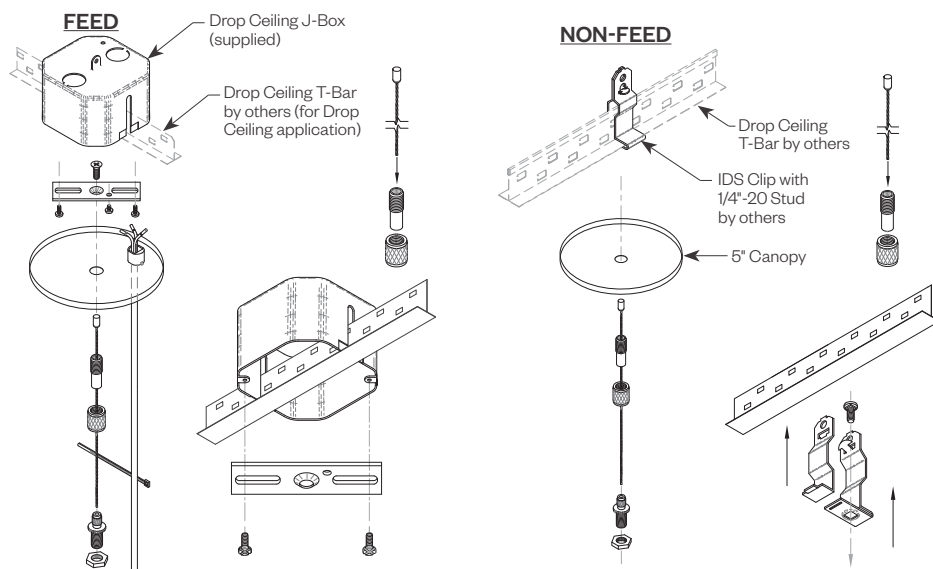
TYPE:

Cable Kit Suspension - Ceiling or Gypsum Board (ASW04, ASW10, ASW20, ASB04, ASB10, ASB20)



Cat#	Length	Cord/Canopy	Application
ASW04	4'	white/white	ceiling tile/gypsum
ASW10	10'	white/white	ceiling tile/gypsum
ASW20	20'	white/white	ceiling tile/gypsum
ASB04	4'	black/black	ceiling tile/gypsum
ASB10	10'	black/black	ceiling tile/gypsum
ASB20	20'	black/black	ceiling tile/gypsum
ASW04T	4'	white/white	ceiling tee
ASW10T	10'	white/white	ceiling tee
ASW20T	20'	white/white	ceiling tee
ASB04T	4'	black/black	ceiling tee
ASB10T	10'	black/black	ceiling tee
ASB20T	20'	black/black	ceiling tee

Tee Grid or Screw Slot (ASW04T, ASW10T, ASW20T, ASB04T, ASB10T, ASB20T)



Linea® 3.5"

Linear Indirect



PROJECT:

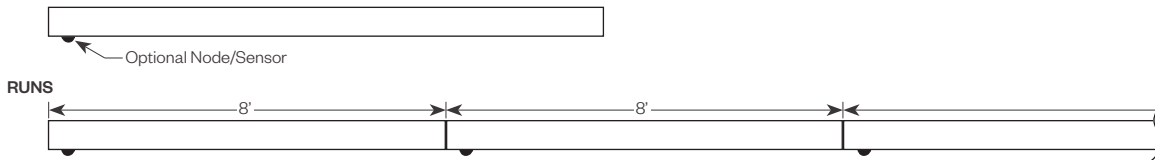
TYPE:

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)



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.

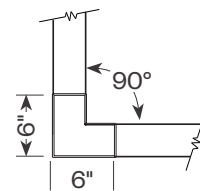
Continuous runs must be the same length in pairs for closed configuration.

Custom Patterns

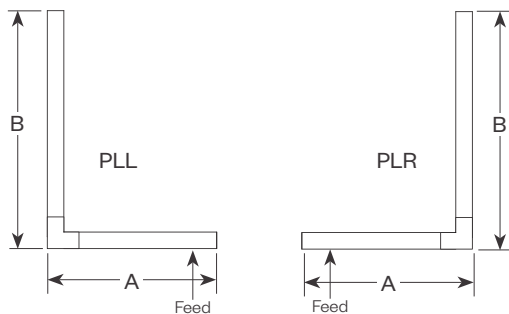
Please provide drawings of your configuration.

Made to Measure: +/- 1/8", consult factory.

PC - custom pattern, please provide drawings and consult factory.



Linea 3.5 Indirect
Solid, not lit

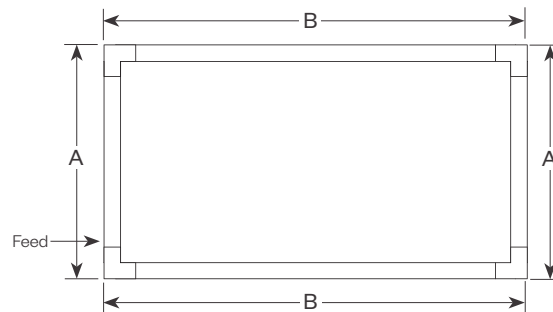


PLL - L Left, (2) straights + (1) 90° corner, leg right

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

Provide overall lengths: A' & B'

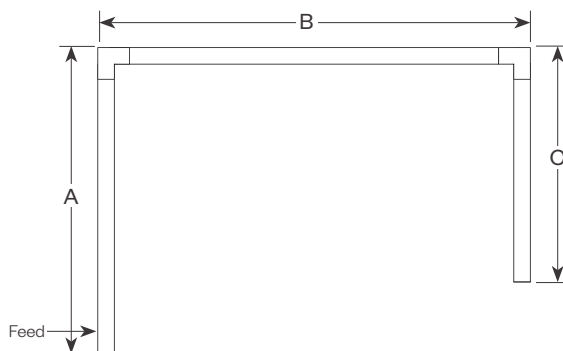
Nomenclature: A-B-PLL A-B-PLR



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

Provide overall lengths: A' & B'

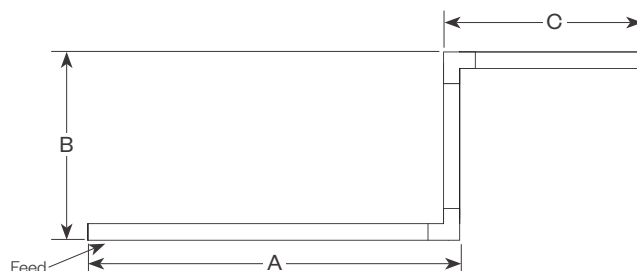
Nomenclature: A-B-PR



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



Delta Intelligent Building Technologies

PROJECT:

TYPE:

Performance Data

Multiplying Factors: (Multiplying Factor is based on 3500K-83 120V IES file on website)

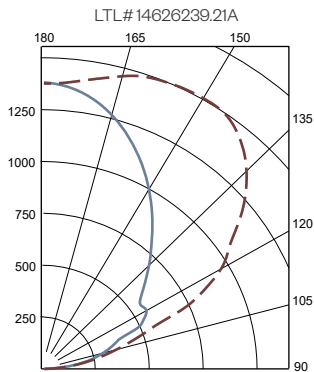
Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.31	0.42	0.53	0.63	0.72	0.81	0.90	1.0

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 BATWING 10W 3500K 4FT

Total Watts: 36; Total Lumens: 4653

Source: 120 White LED's



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%

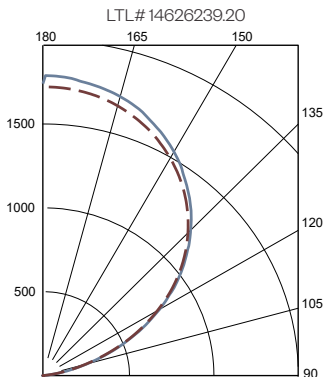
RC	80			
RW	70	50	30	10
ROR				
0	95	95	95	95
1	87	83	79	76
2	79	72	66	62
3	72	63	57	51
4	65	56	48	43
5	60	49	42	36
6	55	44	36	31
7	50	39	32	27
8	47	35	28	23
9	43	32	25	20
10	40	29	22	18

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

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

Total Watts: 36; Total Lumens: 4989

Source: 120 White LED's



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
ROR				
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"

Linear Indirect



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 ---

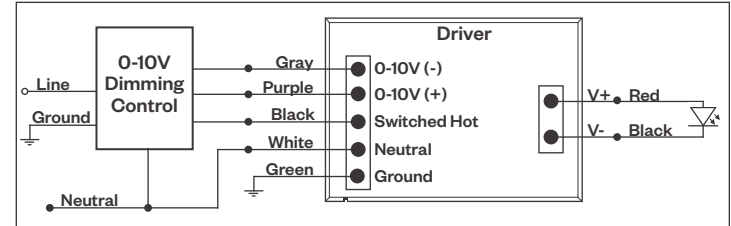
0-10V - DIMMING (Standard)

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			Central System
Lutron:	Wattstopper:	Leviton:	Lutron Grafikx Eye with GRX-TV1 Interface
Diva - DVSTV	ADF-120277	Renoir II	
Maestro - MS-Z101			
Nova-T - NTSTV-DV			

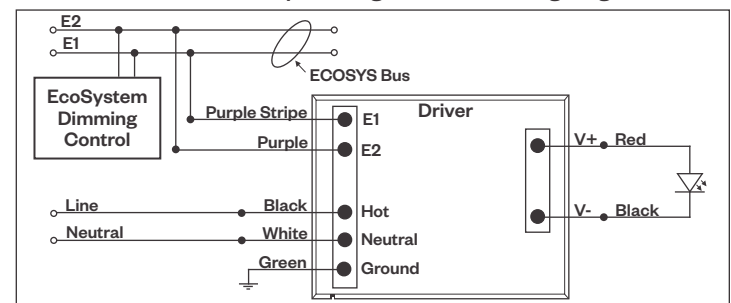
LUTRON LDE1 DIMMING

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.

PROJECT:

TYPE:

Static White - Dimming Compatibility *(continued)*

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 ---

DALI - DALI DIMMING 120V-277V

Digital control protocol allows individual fixture control

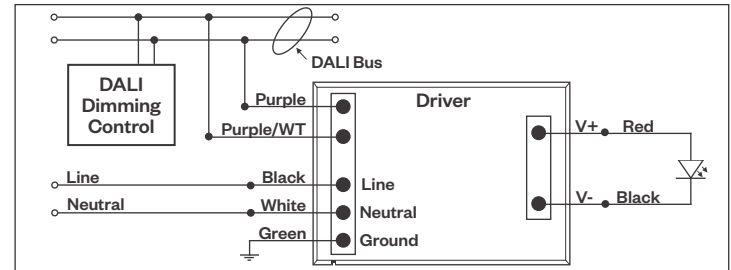
Notes:

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

Compatible Dimmers*:

Wall Box	Central System
Leviton CD250 Controller	Dynalite
	Fifth Light

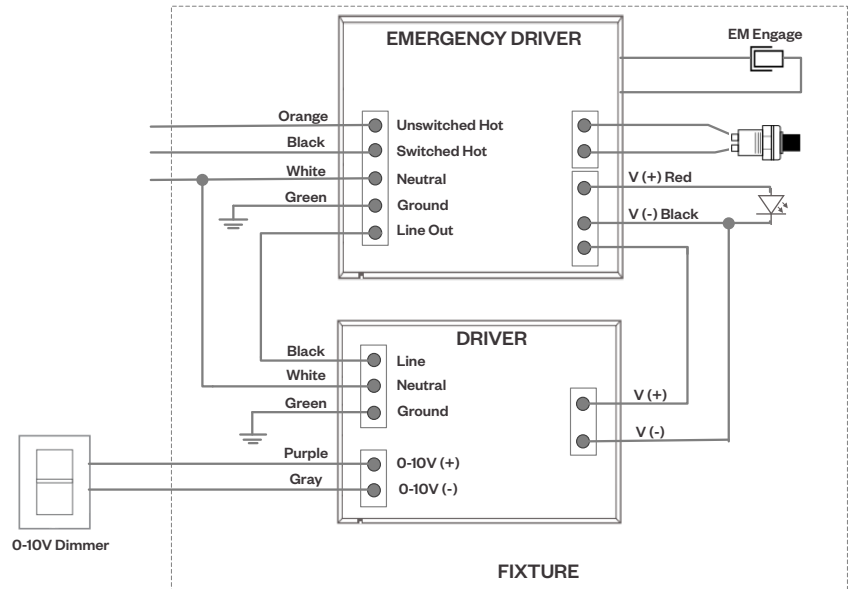
DALI Wiring Diagram



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.

Linea® 3.5"

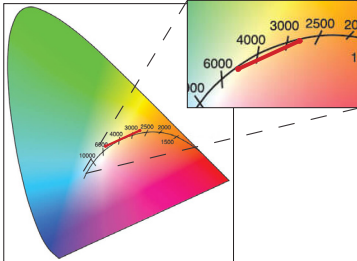
Linear Indirect



PROJECT:

TYPE:

Tunable White



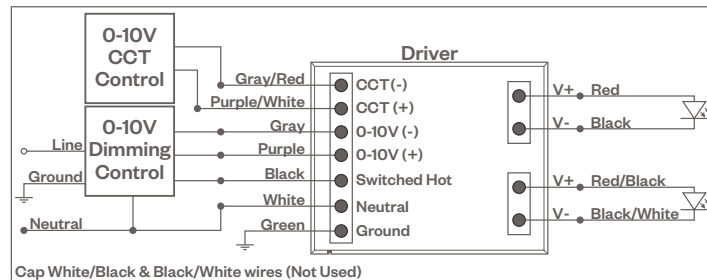
Tunable White range from 2700K-5700K, 90 CRI.
See wiring diagrams below.

Tunable White - Dimming Compatibility

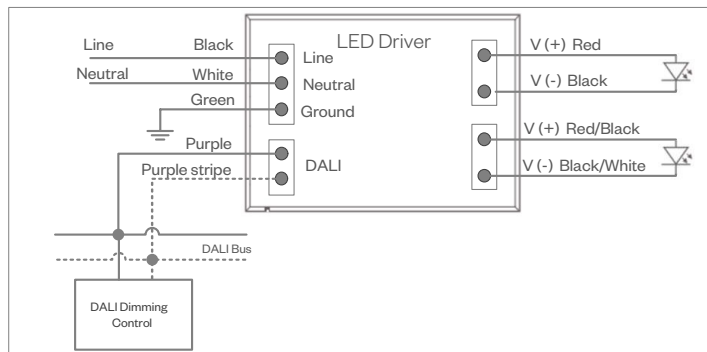
Amerlux® Linea® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (*Dimmer, Fixture Quantity, Voltage,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

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

0-10V Wiring Diagram



DALI DT8 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.