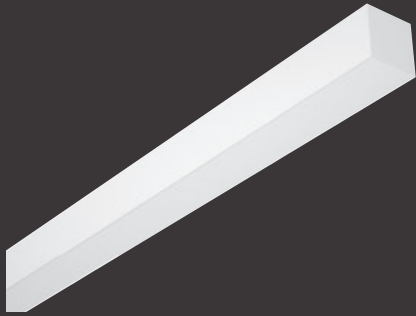


Linea® 3.5"

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)
Lumen Output:	4,302max; 123.2 Lm/W (10W, 4ft fixture)
Color Temp:	2700K, 3000K, 3500K, 4000K
CRI:	83 typ. (2700K, 3000K, 3500K, 4000K)
Dimming:	0-10V, 1% dim (standard) Lutron Hi-lume® 2 wire (120V only) Lutron Hi-lume® EcoSystem, 1% dim, fade to off Lutron Hi-lume® 5 Series DALI dimming, 0.1% dim

PROJECT:

TYPE:

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

Performance Chart

Wattage Per Foot	Delivered Lumens	LPW	Color Temp
5	2,394	130	3000K
10	4,302	123.2	3000K

*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	22.3	0.18	41.9	0.35
	277V	22.9	0.09	41.6	0.16
10	120V	42.1	0.35	84.2	0.70
	277V	41.5	0.15	83.0	0.30

Electronic multi-volt (120V-277V), 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

Linear Indirect LED



PROJECT:

TYPE:

Ordering Information



1 Model
LIN3.5I-A16*

2 Optics
UC - upper clear lens cover (standard)
BAT - batwing uplight

3 Mounting
ASW10 - through ceiling tile or gyp board, white, 10'
ASW20 - through ceiling tile or gyp board, white, 20'
ASB10 - through ceiling tile or gyp board, black, 10'
ASB20 - through ceiling tile or gyp board, black, 20'
ASW10T - over ceiling tee, white, 10'
ASW20T - over ceiling tee, white, 20'
ASB10T - over ceiling tee, black, 10'
ASB20T - over ceiling tee, black, 20'
WM - wall mount

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

5 Color Temp
83 CRI:
27 - 2700K-83
30 - 3000K-83
35 - 3500K-83
40 - 4000K-83
92 CRI optional, consult factory

6 Finish
HW - high reflectance matte white
BT - black texture
ST - silver texture
For other RAL color, consult factory

7 Voltage
120/277

8 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 of 2	- PZ
- CON		
- CUS		

9 Configuration
IND¹ - 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 page 7 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
Custom Patterns:
PC - please provide drawings and consult factory

10 Drivers
O-10V - 1% electronic dimming, multi-volt (120V-277V) constant current driver (standard).
HILUME-A-LTE - Lutron "A" Series, 1% dim, 2-wire, 120V only
HILUME-H-ECO - Lutron "H" Series, 1% dim, fade to off, EcoSystem
HILUME-5-ECO - Lutron "5" Series, EcoSystem
DALI - DALI Dimming 120V-277V, 0.1% dim

11 Options/Accessories
ENLS - Enlighted Sensor (0-10v driver only and not available on 2' & 3' lengths)
EMC-PF² - emergency circuit requires power feed located in last fixture section (for other locations consult factory)
PF² - Extra power feed for additional circuiting

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

2 - Not available with IND (individual) configuration.

* 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.

Linea[®] 3.5" Indirect

Linear Indirect LED



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.

Color Temperature Options:

2700K, 3000K, 3500K, 4000K

CRI: 83 typical, 92 optional - consult factory

R9: 16 @ CRI 83

R9: >50 @ CRI 92

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.

Drivers

0-10V - 1% electronic dimming, multi-volt (120V-277V) constant current driver (standard). Cap leads for non-dim applications.

Optional Drivers:

HILUME-A-LTE - Lutron "A" Series, 1% dim, 2-wire, 120V only

HILUME-H-ECO - Lutron "H" Series, 1% dim, fade to off, EcoSystem

HILUME-5-ECO - Lutron "5" Series, EcoSystem

DALI - DALI Dimming 120V-277V, 0.1% dim

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...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.

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

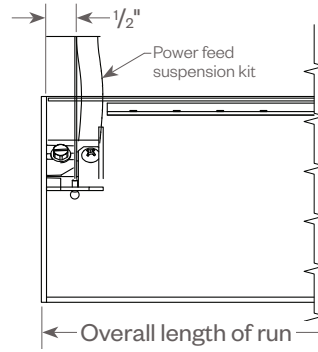
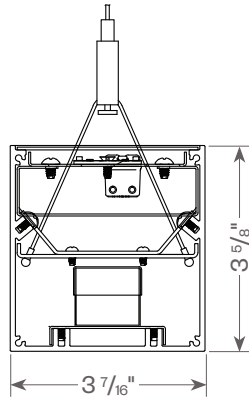
Linear Indirect LED



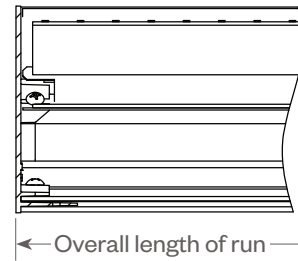
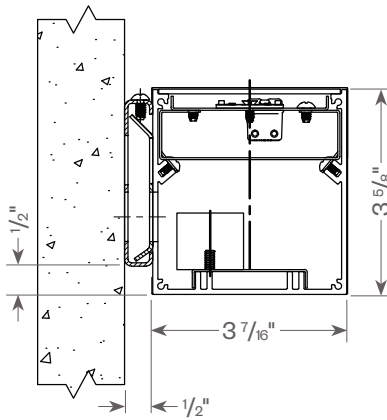
PROJECT:

TYPE:

LINEA 3.5" INDIRECT

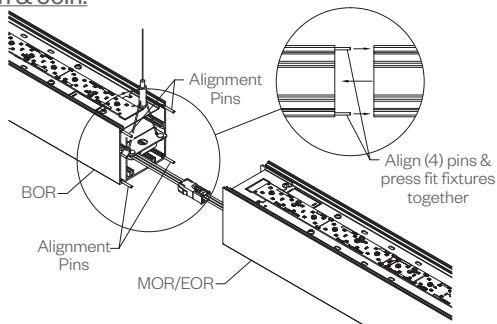


LINEA 3.5" INDIRECT WALL MOUNT



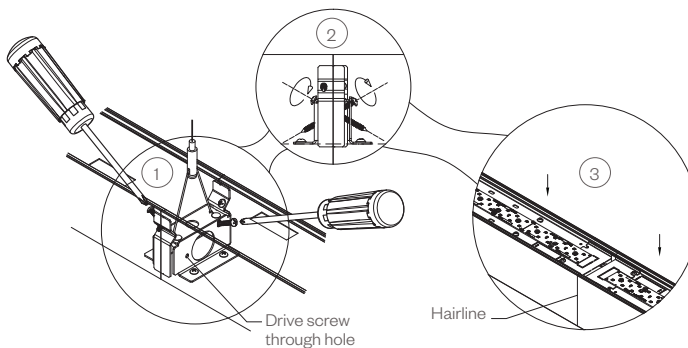
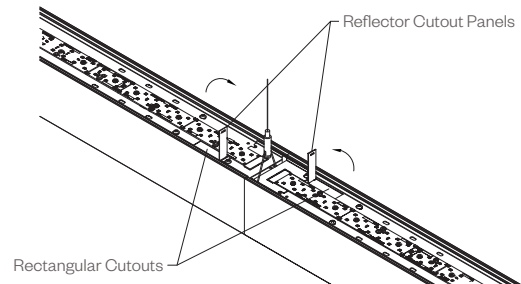
JOINING THE HOUSINGS

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

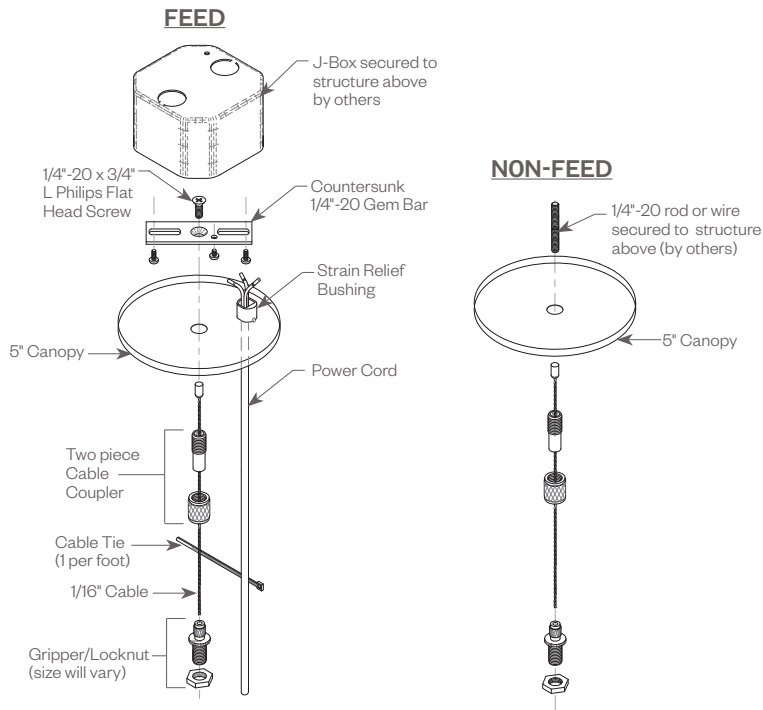


PROJECT:

TYPE:

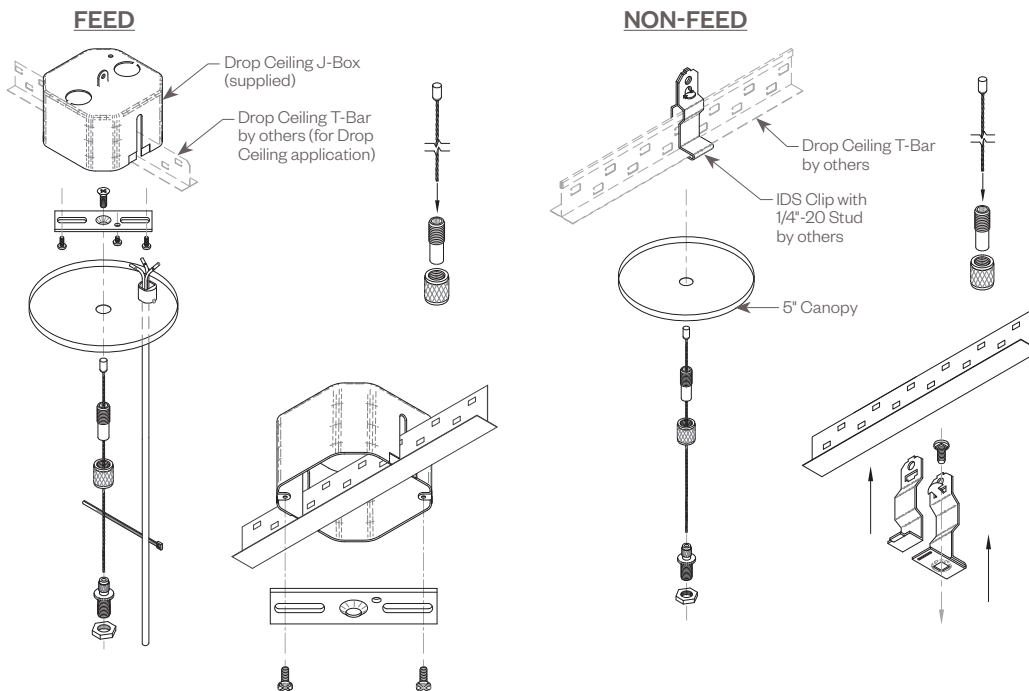
CABLE KIT SUSPENSION OPTIONS:

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)



Linea[®] 3.5" Indirect

Linear Indirect LED



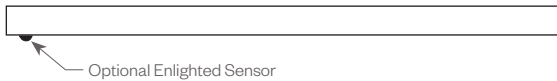
PROJECT:

TYPE:

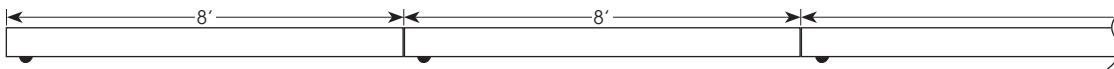
OPTIONAL ENLIGHTENED SENSOR:

Amerlux[®] and Enlighted have partnered to create building environments that are safer, and smarter, than ever before. At the heart of our partnership is Enlighted's Smart Sensor, the most advanced digital sensor available today. Integrated into Amerlux products, the sensor seamlessly collects and communicates dense data on building security, occupancy, performance, environmental conditions, ambient light levels, temperature, and energy consumption. This intelligence provides building managers with unprecedented guidance on cost savings and site-planning efficiencies. Enlighted Sensor (ENLS) is available with 0-10V driver only. Minimum run length is 4'. Enlighted power pack is provided with ENLS option.

4 FT OR 8 FT



RUNS



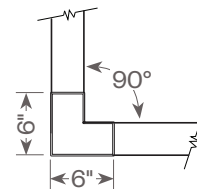
LINEA 3.5" PATTERNS:

Standard Patterns

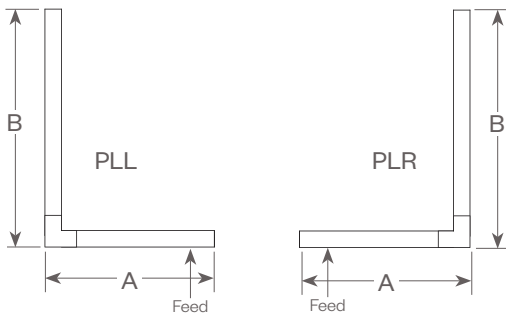
All corners are standard 90°, standard length legs.
 Use standard lengths: 4' min to 8' in 1 foot increments.
 Continuous runs must be the same length in pairs for closed configuration.

Custom Patterns

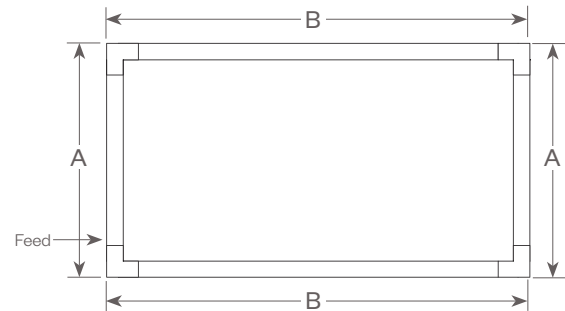
Please provide drawings of your configuration.
 Made to Measure: +/- 1/8", consult factory.
 PC - custom pattern, please provide drawings and consult factory



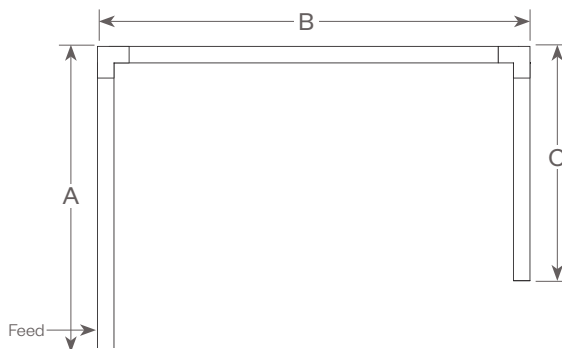
Linea 3.5 Indirect
Solid, not lit



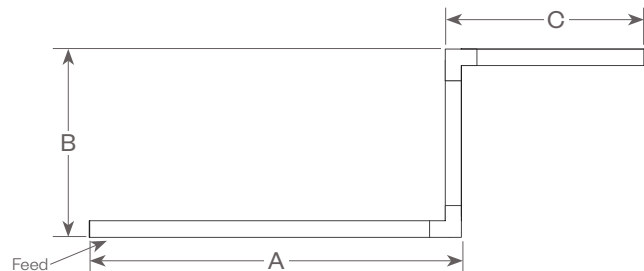
PLL - L Left, (2) straights + (1) 90° corner, leg right
PLR - L Right, (2) straights + (1) 90° corner, leg left
 Provide overall lengths: A' & B'
 Nomenclature: A-B-PLL A-B-PLR



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

Linea[®] 3.5" Indirect

Linear Indirect LED



PROJECT:

TYPE:

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

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

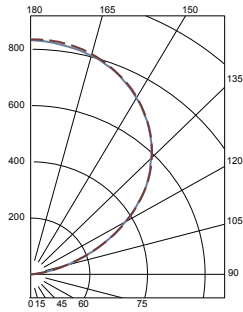
Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.63	0.82	1.0	1.17	1.34	1.50	1.64	1.8

CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.87	0.93	1.0	1.08

LINEA 3.5" INDIRECT UPPER CLEAR LENS 5W 3500K 4FT

Total Watts: 18
Total Lumens: 2,394
Source: 120 White LED's

LTL# 11665872.13



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	0	0.0
0-60	0	0.0
0-90	0	0.0
90-180	2394	100.0

Luminaire Efficacy = 130.0 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

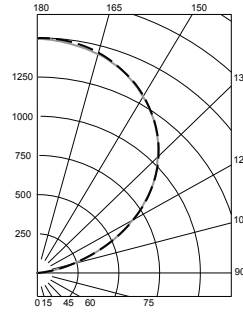
RC	RW			
	70	50	30	10
R0R				
0	1949	1949	1949	1949
1	1768	1692	1624	1562
2	1605	1477	1369	1278
3	1461	1296	1167	1063
4	1331	1143	1002	893
5	1216	1012	866	757
6	1115	901	755	649
7	1026	808	663	561
8	948	727	586	487
9	878	658	521	427
10	816	598	465	375

Note: Values expressed as Lumens delivered to the task surface.

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

Total Watts: 35
Total Lumens: 4,302
Source: 120 White LED's

LTL# 11665872.14



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	0	0.0
0-60	0	0.0
0-90	0	0.0
90-180	4302	100.0

Luminaire Efficacy = 123.2 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	RW			
	70	50	30	10
R0R				
0	3501	3501	3501	3501
1	3176	3040	2917	2806
2	2884	2653	2460	2295
3	2624	2329	2097	1910
4	2392	2053	1801	1605
5	2186	1818	1556	1361
6	2004	1619	1357	1165
7	1844	1451	1192	1007
8	1703	1306	1052	876
9	1577	1182	935	767
10	1466	1074	835	674

Note: Values expressed as Lumens delivered to the task surface.

Linea[®] 3.5" Indirect

Linear Indirect LED



PROJECT:

TYPE:

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

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

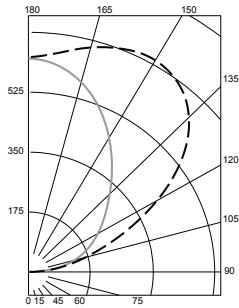
Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.63	0.82	1.0	1.17	1.34	1.50	1.64	1.8

CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.87	0.93	1.0	1.08

LINEA 3.5" INDIRECT BATWING LENS 5W 3500K 4FT

Total Watts: 18
Total Lumens: 2,129
Source: 120 White LED's

LTL# 11665872.15



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	0	0.0
0-60	0	0.0
0-90	0	0.0
90-180	2129	100.0

Luminaire Efficacy = 115.6 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

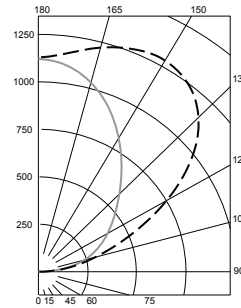
RC	RW			
	70	50	30	10
R0R				
0	1733	1733	1733	1733
1	1572	1505	1444	1389
2	1428	1313	1217	1136
3	1299	1153	1038	945
4	1184	1016	891	795
5	1082	900	770	674
6	992	802	671	577
7	913	718	590	498
8	843	647	521	433
9	781	585	463	379
10	725	532	413	334

Note: Values expressed as Lumens delivered to the task surface.

LINEA 3.5" INDIRECT BATWING LENS 10W 3500K 4FT

Total Watts: 35
Total Lumens: 3,831
Source: 120 White LED's

LTL# 11665872.16



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	0	0.0
0-60	0	0.0
0-90	0	0.0
90-180	3831	100.0

Luminaire Efficacy = 109.7 lm/w

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	RW			
	70	50	30	10
R0R				
0	3118	3118	3118	3118
1	2829	2707	2598	2499
2	2569	2363	2191	2044
3	2337	2074	1867	1701
4	2131	1828	1604	1430
5	1946	1619	1386	1212
6	1785	1442	1208	1038
7	1642	1292	1061	897
8	1516	1163	937	780
9	1405	1053	833	683
10	1305	956	744	600

Note: Values expressed as Lumens delivered to the task surface.

Linea[®] 3.5" Indirect

Linear Indirect LED



PROJECT:

TYPE:

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!

Compatible Dimmers†:

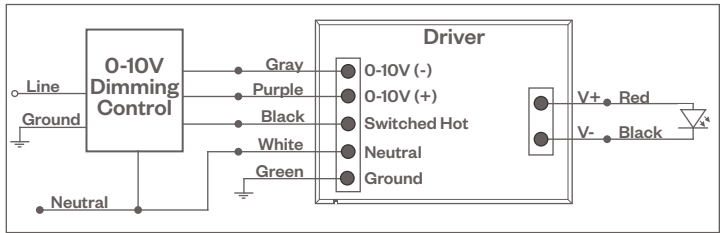
Wall Box

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

Center System

Lutron Grafik Eye with GRX-TV1 Interface

0-10V Wiring Diagram



LUTRON HI-LUME DIMMING

Integrates into Lutron EcoSystem building management

Notes:

- 120V or 277V*
- Dims down to less than 5% light output
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Compatible Dimmers†:

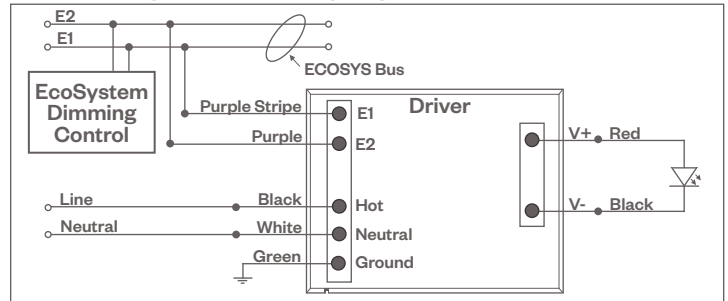
Wall Box

Lutron:
Diva
Maestro
Nova-T
Vareo

Center System

Lutron EcoSystem compatible controls

**HILUME-H-ECO, HILUME-5-ECO
EcoSystem Digital Control Wiring Diagram**



Notes:

* Driver is 277V dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120V wiring colors and method. Please refer to 277V dimmer installation instructions for 277V wiring diagrams.

† The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.

Linea[®] 3.5" Indirect

Linear Indirect LED



PROJECT:

TYPE:

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 ---

LUTRON HILUME-A-LTE DIMMING

Utilizes "Standard" incandescent dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

Notes:

- 120V only
- Dims down to less than 1% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

Compatible Dimmers[†]:

Wall Box (Incandescent Style, Wattage as required)

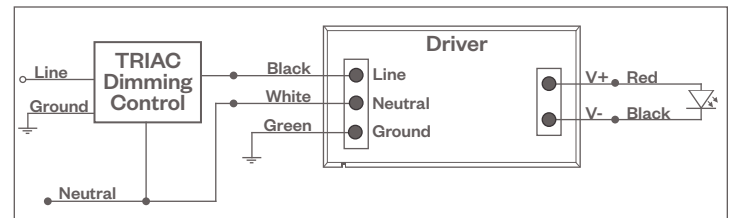
Lutron:

- Diva
- Maestro
- Nova-T
- Vareo
- Skylark

Center System

- Lutron "GP" Panel
- Lutron Grafik Eye QS

Lutron HILUME-A-LTE Wiring Diagram



DALI - DALI DIMMING 120V-277V

Digital control protocol allows individual fixture control

Notes:

- 120V - 277V*
- Dims down to 0.1% light output in most cases

Compatible Dimmers[†]:

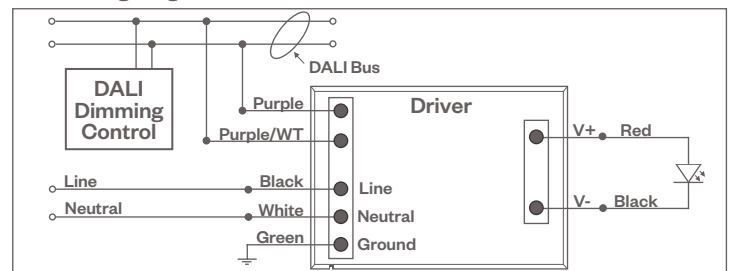
Wall Box

Leviton CD250 Controller

Center System

- Dynalite
- Fifth Light

DALI Wiring Diagram



Notes:

* Driver is 277V dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120V wiring colors and method. Please refer to 277V dimmer installation instructions for 277V wiring diagrams.

† The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.