

Linea[®] 2.5"

Linear Direct LED



Features

Linea 2.5" drives your design scenario, seamlessly. Streamlined and flexible, these architectural LED pendants provide the freedom to create truly dynamic spaces. A synthesis of aesthetics, performance and energy efficiency, the Linea family delivers on its promises. Linea 2.5" complements our Gruv 2.5" products

Product Overview

Type:	Cable Suspended, Wall or Surface Direct
Wattage:	5W/ft, 10W/ft (other wattages available see p2)
Lumen Output:	3,873 max; 93.2 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	2,053	103.2	3000K
10	3,873	93.2	3000K

*Data is based on 3500K-83 IES files available on website
Data is based on 4' fixture with Performance 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 "	" □ "	" L "	Wall to Ceiling	Custom*
Yes	Yes	Yes	Yes	Yes	No	Yes

*Submit drawing, consult factory



Linea[®] 2.5" Direct

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PROJECT:

TYPE:

Ordering Information



1 Model
LIN2.5D-A16*

2 Optics
PL - performance lens (standard)
DL - designer lens

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
SM - surface 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

x	x	x
(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 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, (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
0-10V - 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[®] 2.5" Direct

Linear Direct LED



PROJECT:

TYPE:

Specifications

Application

Open office plan, conference rooms, corridors or any indoor space where the higher light levels of a direct ambient lighting system are required.

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

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.

PL - Performance Lens provides high efficiency with controlled lens surface brightness (standard).

DL - Designer Lens provides flat even glow on lens. Best when lens is in direct view.

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. 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. If ordering please give overall lengths.

A'-B'-PLL - L Left - (1) 90° Corner 2 segments. Specify overall segments: A' & B'

A'-B'-PLR - L Right - (1) 90° Corner 2 segments. Specify overall segments: A' & B'

A'-B'-PR - Rectangle - (4) 90° Corners joining 4 segments. Specify overall segments: A' & B'

A'-B'-C'-PU - U shape - (2) 90° Corners joining 3 segments. Specify overall segments: A', B', & C'

A'-B'-C'-PZ - Z shape - (2) 90° Corners joining 3 segments. Specify overall segments: A', B', & C'

See page 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 2.5 Direct is intended to be pendant, wall, or surface mounted in continuous rows. Standard or custom patterns available.

LIN2.5D-A16...ASW10 - Direct 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

LIN2.5D-A16...WM - Direct Wall Mount 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.

LIN2.5D-A16...SM - Direct Surface Mounted - Housing needs to be attached to solid structure above. Mounting holes are pre-drilled at factory. Some fixture disassembly and reassembly required. Mounting hardware by others.

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[®] 2.5" Direct

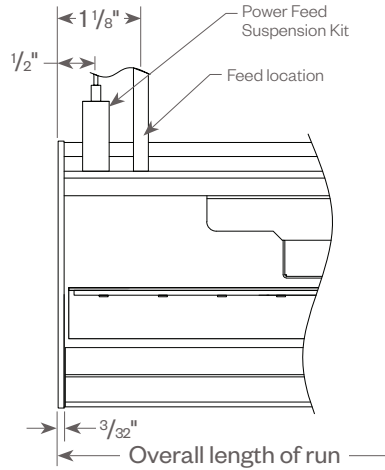
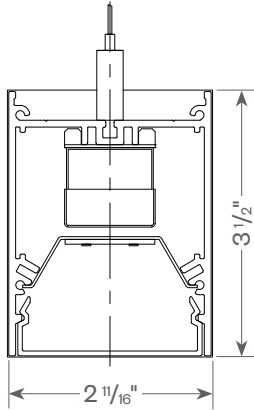
Linear Direct LED



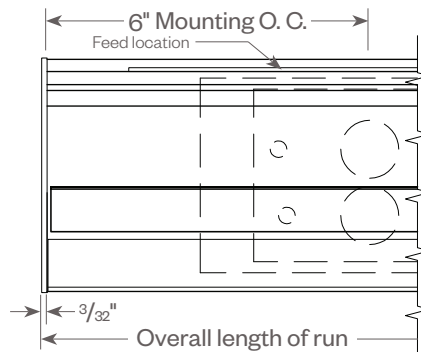
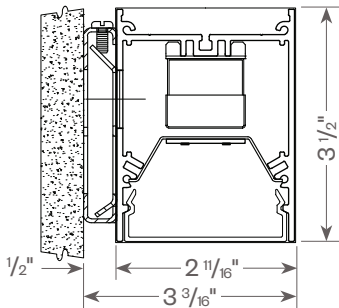
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TYPE:

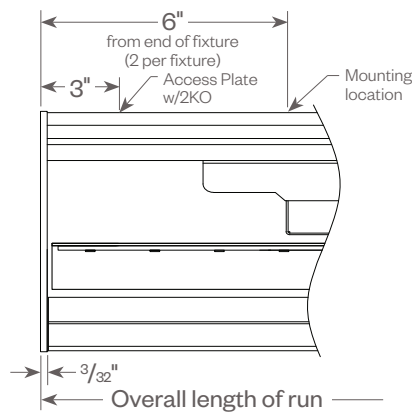
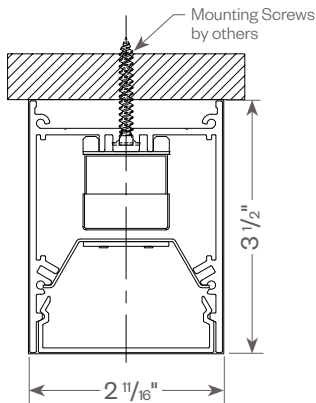
LINEA 2.5" DIRECT



LINEA 2.5" DIRECT WALL MOUNT



LINEA 2.5" DIRECT SURFACE MOUNT



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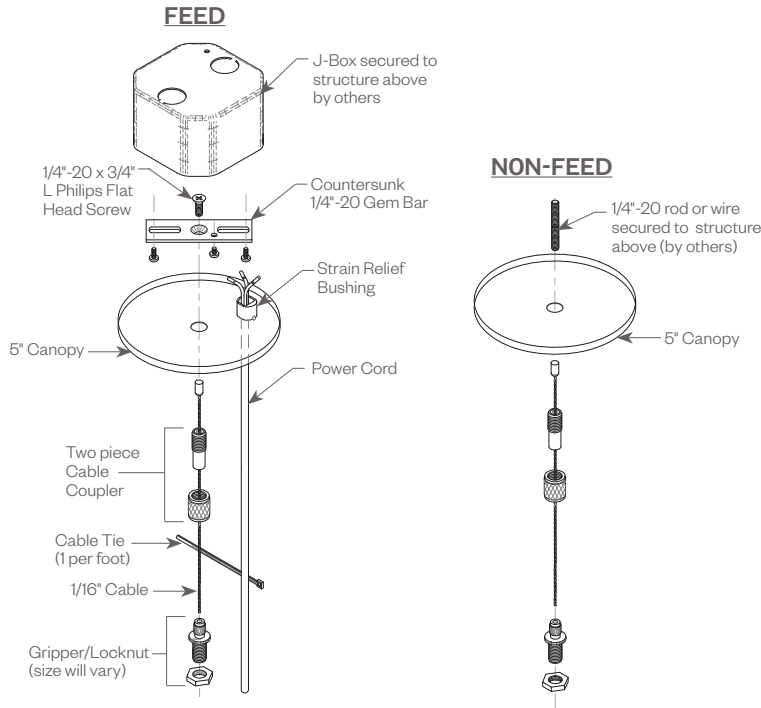


PROJECT:

TYPE:

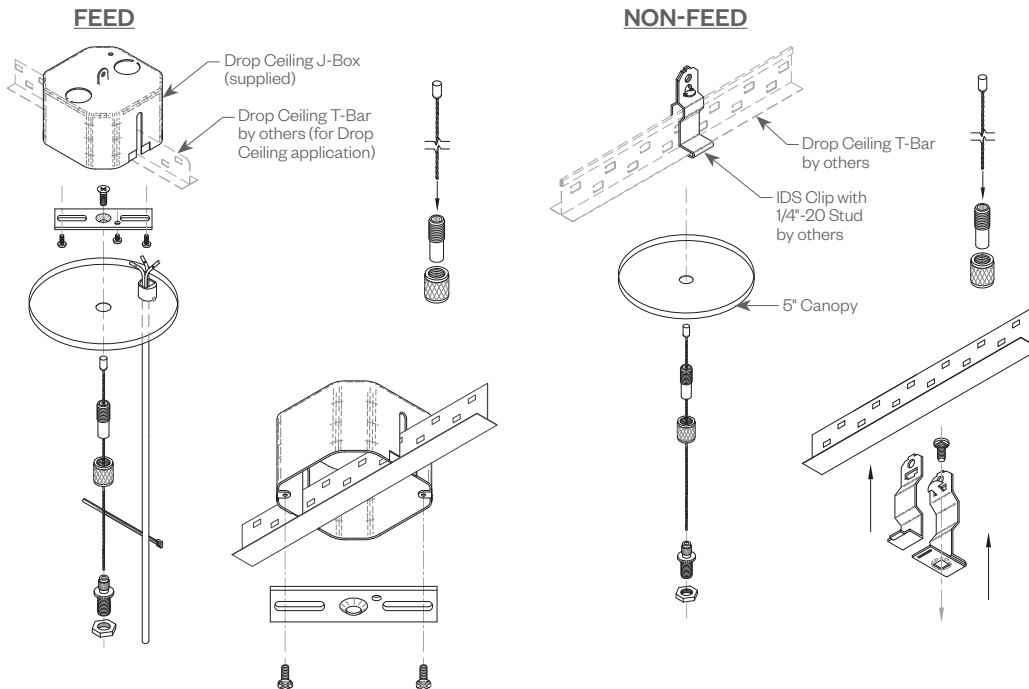
CABLE KIT SUSPENSION OPTIONS:

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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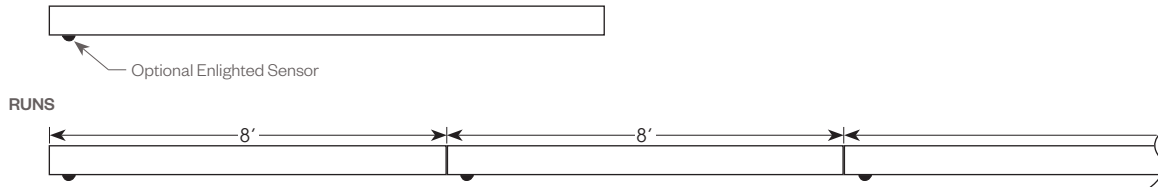
PROJECT:

TYPE:

OPTIONAL 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



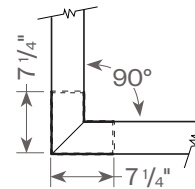
LINEA 2.5" PATTERNS:

Standard Patterns

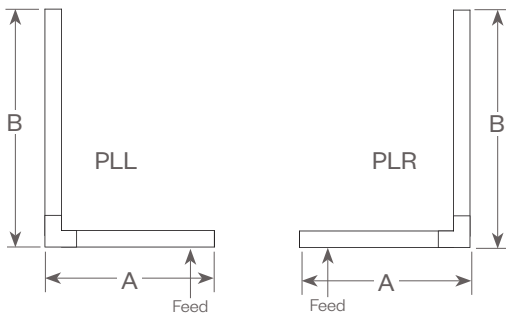
All corners are standard 90°, standard length legs.
 Use standard lengths: 4' min to 8' in 1 foot increments.
 Continuous runs must be the same length in pairs for closed configuration.

Custom Patterns

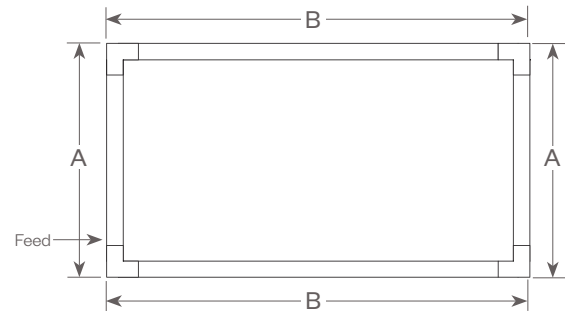
Please provide drawings of your configuration.
 Made to Measure: +/- 1/8", consult factory.
 PC - custom pattern, please provide drawings and consult factory



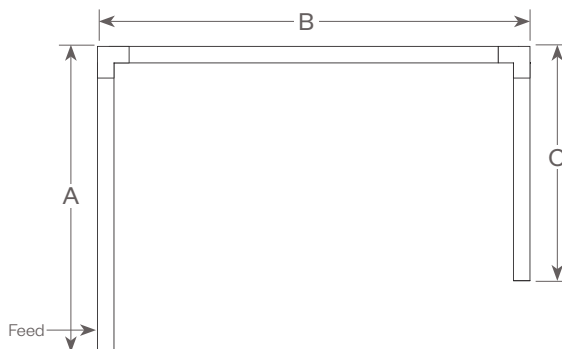
Linea 2.5 Lens
Mitered Lens



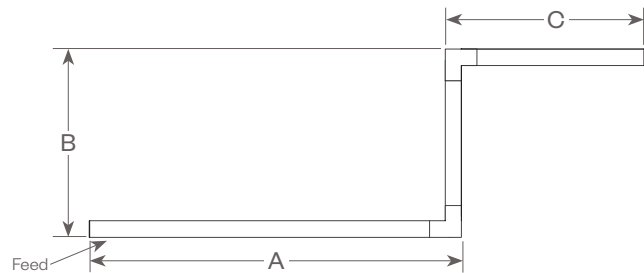
PLL - L Left, (2) straights + (1) 90° corner, leg right
PLR - L Right, (2) straights + (1) 90° corner, leg left
 Provide overall lengths: A' & B'
 Nomenclature: A-B-PLL A-B-PLR



PR - Closed Rectangle, (4) straight lengths + (4) 90° corners
 Provide overall lengths: A' & B'
 Nomenclature: A-B-PR



PU - Open U, (3) straight lengths + (2) 90° corners
 Provide overall lengths: A', B' & C'
 Nomenclature: A-B-C-PU



PZ - Open Z, (3) straight lengths + (2) 90° corners
 Provide overall lengths: A', B' & C'
 Nomenclature: A-B-C-PZ

Linea[®] 2.5" Direct

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PROJECT:

TYPE:

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

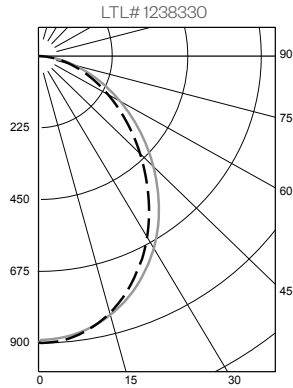
MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

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

CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.93	1.0	1.08	1.15

LINEA 2.5" DIRECT PERFORMANCE LENS 5W 3000K 4FT

Total Watts: 20
Total Lumens: 2,053
Source: 128 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt	Zone	Lumens	%Fixt
0-5	21.4	1.0	45-50	173.8	8.5
5-10	63.2	3.1	50-55	157.2	7.7
10-15	101.7	5.0	55-60	137.2	6.7
15-20	134.9	6.6	60-65	115.1	5.6
20-25	161.1	7.8	65-70	92.0	4.5
25-30	179.9	8.8	70-75	68.7	3.3
30-35	190.0	9.3	75-80	46.2	2.3
35-40	191.5	9.3	80-85	25.7	1.3
40-45	185.5	9.0	85-90	7.7	0.4

Zone	Lumens	%Fixt
0-40	1044	50.8
0-60	1697	82.7
0-90	2053	100.0
90-180	0	0.0

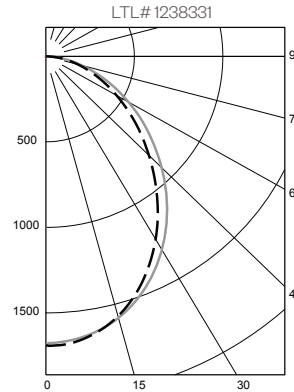
Efficacy (lumens/watt) = 103.2 lpw

COEFFICIENTS OF UTILIZATION

RC	RW			
	70	50	30	10
RCR (expressed as lumens delivered to the task surface)				
0	2443	2443	2443	2443
1	2246	2154	2071	1997
2	2056	1896	1763	1652
3	1884	1679	1520	1393
4	1734	1499	1327	1196
5	1601	1348	1171	1041
6	1484	1221	1044	918
7	1380	1112	939	818
8	1288	1019	851	735
9	1206	939	776	666
10	1133	870	712	607

LINEA 2.5" DIRECT PERFORMANCE LENS 10W 3000K 4FT

Total Watts: 42
Total Lumens: 3,873
Source: 128 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt	Zone	Lumens	%Fixt
0-5	40.3	1.0	45-50	327.5	8.5
5-10	118.8	3.1	50-55	297.4	7.7
10-15	191.3	4.9	55-60	260.1	6.7
15-20	254.0	6.6	60-65	218.2	5.6
20-25	303.6	7.8	65-70	174.4	4.5
25-30	338.2	8.7	70-75	130.3	3.4
30-35	357.0	9.2	75-80	87.9	2.3
35-40	360.1	9.3	80-85	49.1	1.3
40-45	349.3	9.0	85-90	15.0	0.4

Zone	Lumens	%Fixt
0-40	1963	50.7
0-60	3198	82.6
0-90	3873	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 93.2 lpw

COEFFICIENTS OF UTILIZATION

RC	RW			
	70	50	30	10
RCR (expressed as lumens delivered to the task surface)				
0	4610	4610	4610	4610
1	4237	4062	3906	3765
2	3877	3574	3324	3114
3	3553	3165	2865	2625
4	3269	2825	2500	2252
5	3018	2541	2207	1961
6	2797	2300	1967	1728
7	2601	2096	1769	1539
8	2428	1921	1602	1383
9	2273	1770	1461	1253
10	2136	1639	1341	1143

Linea[®] 2.5" Direct

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PROJECT:

TYPE:

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

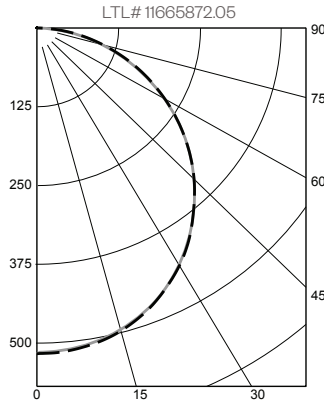
MULTIPLYING FACTORS: (Multiplying Factor is based on 3500K-83 120V IES file on website)

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

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

LINEA 2.5" DIRECT DESIGNER LENS 5W 3500K 4FT

Total Watts: 20
Total Lumens: 1,487
Source: 128 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	656	44.1
0-60	1157	77.8
0-90	1487	100.0
90-180	0	0.0

Luminaire Efficacy = 75.0 lm/w

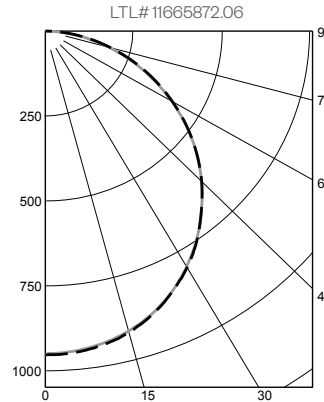
COEFFICIENTS OF UTILIZATION

RC	RW			
	70	50	30	10
ROR				
0	1729	1729	1729	1729
1	1572	1505	1446	1391
2	1424	1310	1215	1133
3	1296	1150	1035	942
4	1185	1019	895	799
5	1090	910	783	688
6	1006	820	693	600
7	934	744	619	530
8	870	680	558	473
9	813	624	506	426
10	763	577	463	386

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

LINEA 2.5" DIRECT DESIGNER LENS 10W 3500K 4FT

Total Watts: 40
Total Lumens: 2,739
Source: 128 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1211	44.2
0-60	2133	77.9
0-90	2739	100.0
90-180	0	0.0

Luminaire Efficacy = 68.7 lm/w

COEFFICIENTS OF UTILIZATION

RC	RW			
	70	50	30	10
ROR				
0	3185	3185	3185	3185
1	2895	2774	2664	2564
2	2624	2414	2239	2089
3	2388	2119	1908	1738
4	2184	1877	1649	1473
5	2008	1678	1444	1268
6	1854	1512	1278	1107
7	1720	1372	1142	978
8	1603	1253	1029	873
9	1499	1151	934	785
10	1406	1063	853	712

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

Linea[®] 2.5" Direct

Linear Direct 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[†]:

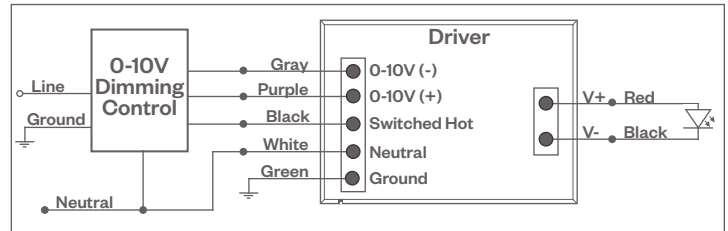
Wall Box

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[†]:

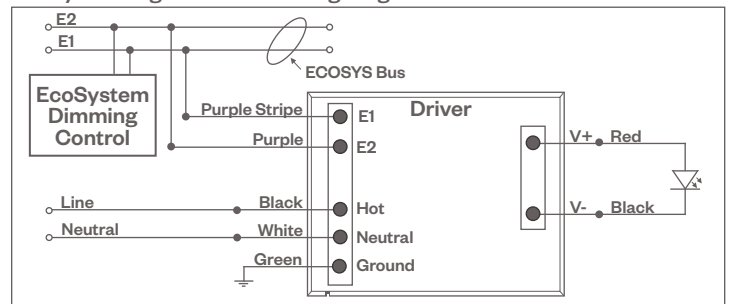
Wall Box

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[®] 2.5" Direct

Linear Direct 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.

V

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)

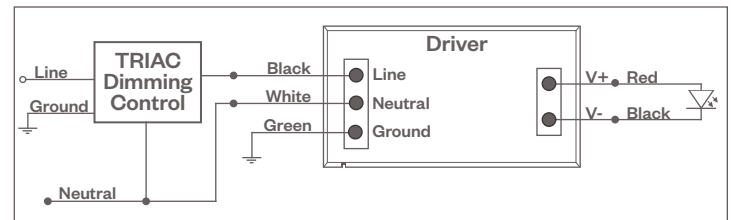
Lutron:

- 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[†]:

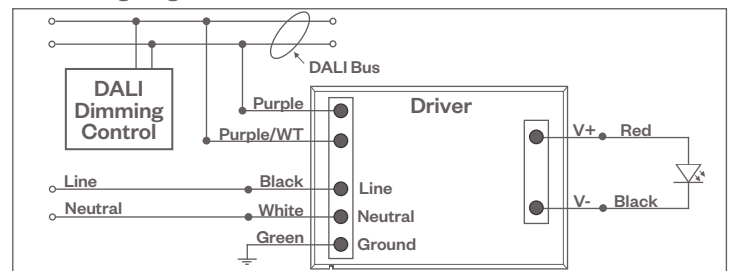
Wall Box

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.