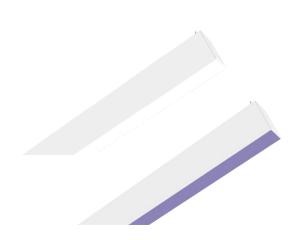
Linear Direct/Indirect LED with Vyv antimicrobial light





Features

Active CLEAN's™ high-intensity, antimicrobial wavelengths of 405 nanometers protect your business with the most beautiful, comfortable, non-glare illumination. Utilizing Vyv's signature UV-free antimicrobial technology, our spec-grade (Linea or Gruv) family of luminaries provides continuous surface cleaning by creating spaces that are inhospitable for bacteria, fungi, yeast, mold, mildew and viruses to live, on any surface—and in any application—the light touches.

Product Overview

Type: Direct/Indirect

Lens Down/Batwing, Clear lens up

Wattage: 3W-16W/ft (Direct); 3W-10W/ft (Indirect)

Lumen Output: See Performance Chart below

Color Temp: 3000K, 4000K

CRI: 85 typ. (Direct); 83 typ. (Indirect)
Dimming: 0-10V, 1% dim to off (standard)

Lutron Hi-lume® EcoSystem, 1% dim, fade to off

DALI dimming, 1% dim

PROJECT:

TYPE:

Fixture Summary (see following pages for more information)

Performance Chart

		Direct	:		Indirect				
_	Delivered Lumens	LPW		_	Delivered Lumens		Color Temp		
16	2615	41.5	4000K-85	10	5112	142	4000K-83		

Data is based on 4' IES files available on website

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

		4'		8	
Wattage Per Foot		System Watts	Amps	System Watts	Amps
16	120V	62	0.52	124	1.0
(Direct)	277V	61.1	0.22	122.2	0.44
10	120V	36	0.3	72	0.64
(Indirect)	277V	35.9	0.14	71.8	0.28
9	120V	34.1	0.29	68.3	0.57
(Direct)	277V	34.2	0.13	67.4	0.25
5	120V	18.1	0.15	37.6	0.31
(Indirect)	277V	18.8	0.07	37.6	0.14

Electronic multi-volt (120-277VAC), constant current LED driver.

For Total Fixture load, add direct & indirect.









Linear Direct/Indirect LED with Vyv antimicrobial light



PROJECT: TYPE:

Ordering Information

LIN2.5DI-VYV	. <u>PL /</u>			/	/	AW_	. 120/277 .			•	•
1	2	3	4	5	6	7	8	9	10	11	12

- 1 Model LIN2.5DI-VYV
- Optics (select 1 from each list)
 Direct:

PL - performance lens Indirect:

UC - clear cover (standard)

BAT - batwing uplight

- 3 Mounting
 - ASW10 through ceiling tile or gyp board, white, 10'

 $\boldsymbol{\mathsf{ASW20}}$ - 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'

ASB20 - through ceiling tile or gyp board, black 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

- <u>Circuiting</u>
 - 1 single circuit
 - 2- up/down switch separately
- Wattage (per foot)
 ____ (ex. 16/10 16W/ft down & 10W/ft up.

Direct available in 3W/ft-16W/ft. / Indirect available 3-10W/ft) 3 & 4W/ft require 4' min. length

- 6 Color Temp
 - Direct Dual Mode

DM30 - 3000K-80CRI, dual mode (2 circuit) white antimicrobial+light & violet enhanced antimicrobial

DM40 - 4000K-80CRI, dual mode (2 circuit) white antimicrobial+light & violet enhanced antimicrobial

- Indirect
- **30** 3000K-83CRI
- 40 4000K-80CRI
- Finish

 AW Active CLEANTM white

- 8 <u>Voltage</u> 120/277
- 9 Length
- Configuration

IND¹ - individual fixture, 2' to 8' in 1' increments

CON - continuous run > than 8', specify to nearest foot

 $\mbox{\bf CUS}$ - custom made to measure, +/- 1/8" of customer supplied field dimensions

- Drivers
 - OFF-0-10V 1% electronic dim to off, multi-volt (120-277VAC) constant current driver (standard)

HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black

DALI - DALI Dimming 120-277VAC, 1% dim

Note: Review wiring diagrams on pages 8-11 for controls requirements

- Options/Accessories
 - **ENLS** Enlighted Sensor (0-10V driver only and not available on 2' & 3' lengths, can only be used on one circuit)

EMO-PF² - emergency circuit requires power feed located in last fixture section (for other locations consult factory)

PF² - Extra power feed for additional circuiting

EMB - emergency battery pack (not available for lengths under

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

^{2 -} Not available with IND (individual) configuration.

Linear Direct/Indirect LED with Vyv antimicrobial light

PROJECT: TYPE:

Specifications

Application

Commercial, Education and Healthcare ambient lighting that can be customized with made to measure lengths.

ActiveCLEANTM fixtures may be sold in all areas of the United States. Certain states/countries require additional state approvals which are currently in process. For the following, please contact Amerlux for all projects to confirm exact timing for approval: Colorado, Indiana, Hawaii, New Mexico, Oklahoma, Wyoming, Washington DC and Canada. These restrictions are subject to change at any time and will be updated periodically as additional approvals are completed.

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

<u>Direct:</u> All lenses are snap-in, extruded acrylic, with a maximum length of 8'. Fixtures shipped with lenses installed. Amerlux's proprietary acrylic lens provides excellent transmission while effectively concealing source image. PL - Performance Lens provides high efficiency with greater lens surface brightness.

Indirect: Extruded acylic lens with a maximum length of 8'.

BAT - Batwing uplight lens spreads light directly above fixture. 18" minimum distance between ceiling plane and top of fixture suggested.

UC - Upper Clear lens cover.

LED

Internal LED boards powered by Vyv's patented single-diode technology meets international standards for continuous and unrestricted use around people. Vyv stops the growth of and kills* viruses, bacteria, fungi, yeast, mold and mildrew with visible light.

*Testing on a non-enveloped virus (MS2 bacteriophage) showed a 99.985% reduction in controlled laboratory testing in 6 hours on hard surfaces. MRSA and E. coli showed 90%+ reduction in controlled laboratory testing in 24 hours on hard surfaces. Results may vary depending on the amount of light that is reaching the surfaces in the space where the product is installed and the length of time of exposure. Use of Vyv antimicrobial light is not intended to replace manual cleaning

Amerlux's boards (indirect light only) 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. Due to differences in the indirect and direct LED manufacturers, some color differences might be noticeable when fixture is within 6" from the wall.

Color Temperature Options: 3000 K & 4000 K

Dual Mode (DM__) is a 2-circuit option that allows for switching between white Antimicrobial+Light mode and Enhanced Antimicrobial mode which provides maximum enhanced antimicrobial impact through 405nm (violet) light. Switching can be controlled via switch, sensor or control system (see wiring diagrams)

 Direct
 Indirect

 CRI:
 85 typical
 83 typical

 R9:
 10 typical
 16 typical

 Binning:
 4-step
 3-step

 Life:
 36,000 hr.
 50,000 hr.

Note: On certain fixture lengths, there may be noticeable gaps of board missing when switching to the Enhanced Antimicrobial (405nm only, "violet" light) circuit on the dual mode boards. This is the normal and intended application.

(>70% of initial lumens (L70)

How to use: To achieve the recommended amount of antimicrobial protection, it is recommended that a photometric layout is conducted on your space. The light level coming from the ActiveClean fixtures should be a minimum of 500 Lux (46.5 FC). Any indirect light from an ActiveClean fixture or ambient light from nearby fixtures should not be used in the 500 Lux (46.5 FC) calculation. All ActiveClean fixtures should be used in conjunction with standard cleaning practices.

Electrical

Wiring: Individual and "Beginning of Run" (BOR) fixtures are prewired with power cord. All configurations have quick connect power harnesses for row connections.

1 - single circuit

2- up/down switch separately

Wattage: 3W-16W/ft (Direct); 3W-10W/ft (Indirect); (Note: 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 damage is not covered under warranty.

ENLS - Enlighted Sensor (0-10V driver only, not available in 2' & 3' lengths, and can only be used on one circuit)

EMC-PF - Émergency 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.

inish

AW - Active $CLEAN^{TM}$ white powder coat paint with anti-microbial coating. Baked on finish for maximum durability and color stability.

Configurations/Lengths

IND - Individuals are stand alone fixtures made of single lengths of 2' to 8' (in 1' increments). They are supplied with matching painted End Caps and the required mounting hardware. Lengths less than 4' may have restrictions based upon wattage, lengths, drivers or other options.

 \mathbf{CON} - Continuous runs are longer than 8', specified to the nearest whole foot. Continuous runs less than 16' are made of 2 lengths. Continuous runs longer than 16' start with a 8' Beginning of Row (BoR) wired with a power feed and fitted with an End Cap. The majority of the runs are made up of 8' Middle of Run (MoR) lengths. End of Run (EoR) units are made up of 2' to 8' units to the nearest whole foot or a combination of a last 4' MoR and a 5', 6' or 7' EoR. Runs longer than 60' may require a second power feed. Factory installed pins and splines simplify fixture alignment. Lengths are quickly joined with "catch and latch" mechanisms or sorews and sturdy brackets. Quick connectors simplify field wiring.

CUS - Custom made to measure runs are made to nearest 1/8" of customer supplied field measurements. They can be a single custom length or runs configured as described above only EoR's are 2' to 8' out to the nearest 1/8" exact length or a combination of a last 4' MoR with an EoR out to exact length to the nearest 1/8".

Mounting

The Linea 2.5 Direct / 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.

LIN2.5DI-Vyv....ASW10 - Direct / 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

LIN2.5DI-Vyv....WM - Direct 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.

Please note: 1 Circuit is standard, the direct & indirect are on the same circuit. 2 Circuits, direct & indirect switched separately with power feeds at both ends.

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

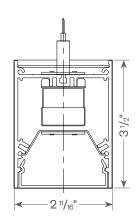
Amerlux's 3 year limited warranty. Please consult Amerlux website for details.

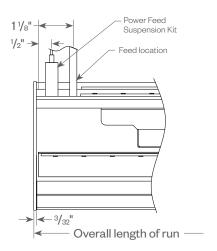
Linear Direct/Indirect LED with Vyv antimicrobial light



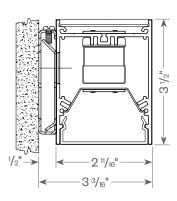
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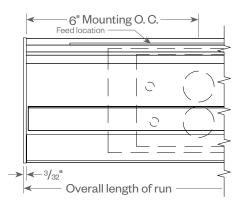
LINEA 2.5" DIRECT/INDIRECT





LINEA 2.5" DIRECT/INDIRECT WALL MOUNT





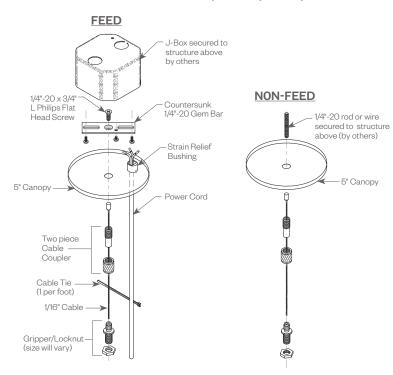
Linear Direct/Indirect LED with Vyv antimicrobial light



PROJECT: TYPE:

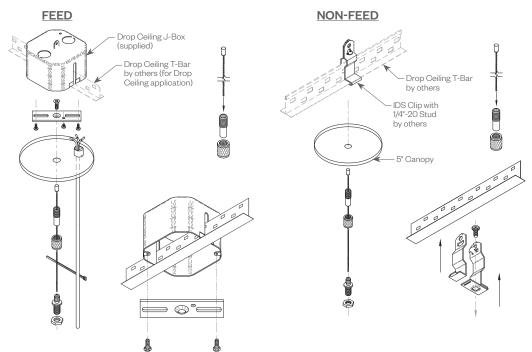
CABLE KIT SUSPENSION OPTIONS:

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)





PROJECT: TYPE:

OPTIONAL ENLIGHTED 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 Optional Enlighted Sensor



Linear Direct/Indirect LED with Vyv antimicrobial light



PROJECT:

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

MULTIPLYING FACTORS: (Multiplying Factor is based on 4000K-80 120V IES file on website)

	LINEA 2.5" DIRECT ACTIVECLEAN											DIRECT					
Wattage:	ЗW	4W	5W	6W	7W	8W	9W	10W	11W	12W	13W	14W	15W	16W	CCT:	3000K	4000K
Factor:	0.19	0.25	0.31	0.38	0.44	0.50	0.56	0.63	0.69	0.75	0.81	0.88	0.94	1.0	Factor:	1.0	1.0

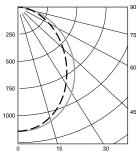
LINEA 2.5" INDIRECT											
Wattage: 3W 4W 5W 6W 7W 8W 9W 10W											
Factor:	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.0			

INDIRECT								
CCT:	3000K	4000K						
Factor:	0.86	1.0						

LINEA 2.5" DIRECT ACTIVECLEAN PL 16W/FT DM40 4000K 4FT

Total Watts: 63 Total Lumens: 2615 Source: 182 White LEDs

LTL#13783324.04A



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1321	50.5
0-60	2161	82.6
0-90	2615	100.0
90-180	0	0.0

Luminaire Efficacy = 41.5 lm/W

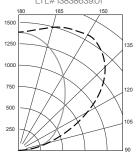
COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20% RW RCR

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

LINEA 2.5" INDIRECT BAT 10W/FT 40 4000K 4FT

Total Watts: 35.9 Total Lumens: 4,654 Source: 112 White LED's LTL# 13838639.01



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	0	0.0
0-60	0	0.0
0-90	0	0.0
90-180	4654	1000

Efficacy = 129.5 lm/W

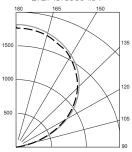
COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20% RC RW RCR

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

LINEA 2.5" INDIRECT UC 10W/FT 40 4000K 4FT

Total Watts: 36 Total Lumens: 5,112 Source: 112 White LED's LTL#13789094.04



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	0	0.0
0-60	0	0.0
0-90	0	0.0
90-180	5112	100.0

Efficacy = 142.1 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.



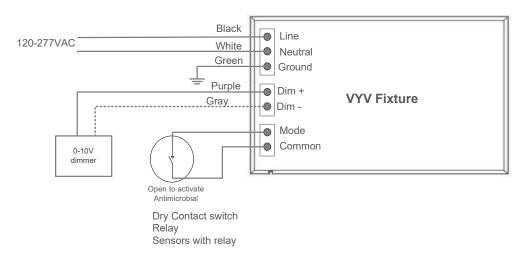
PROJECT: TYPE:

DIMMING COMPATIBILITY:

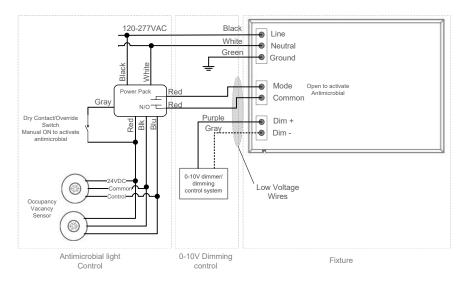
Amerlux® Linea fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc)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

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

0-10V with Dry Contact Control



Low Voltage Independent Occupancy/Vacancy Sensor with Power Pack and 0-10V Dimming Control



McWong Powerpack: PSC-AC-PP-100 Occupancy sensor:PSC-ID-CM-301

Leviton
Powerpack: OSP20-RD0
Occupancy sensor: OSC05-RMW

Legrand/Wattstopper
Powerpack: BZ-200
Occupancy sensor: DT-300/DT-305

IR-Tec Powerpack: PPU-300/301 Occupancy sensor: OS-361DT

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.



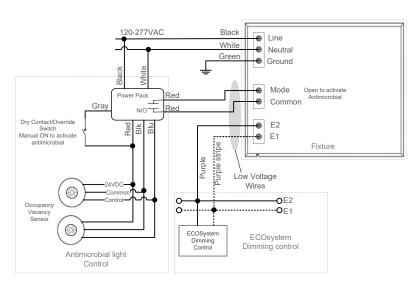
PROJECT: TYPE:

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 ---

Low Voltage Independent Occupancy/Vacancy Sensor with Power Pack and Lutron ECOsystem Dimming Control



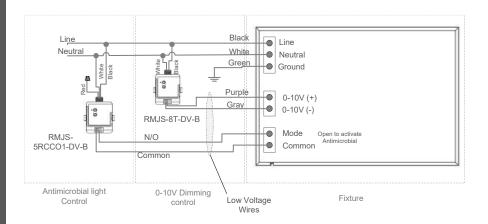
McWong Powerpack: PSC-AC-PP-100 Occupancy sensor:PSC-ID-CM-301

Leviton
Powerpack: OSP20-RD0
Occupancy sensor: OSC05-RMW

<u>Legrand/Wattstopper</u> Powerpack: BZ-200 Occupancy sensor: DT-300/DT-305

IR-Tec Powerpack: PPU-300/301 Occupancy sensor: OS-361DT

Lutron Vive with 0-10V and Relay Control





Pico Remote Control (up to 10)



Radio Powr Savr Occupancy Sensor (ip to 10)

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.

Linear Direct/Indirect LED with Vyv antimicrobial light



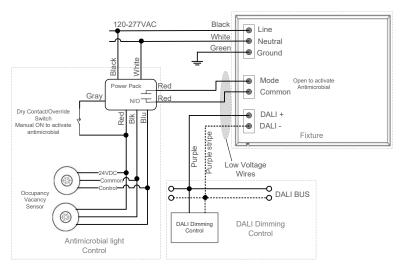
PROJECT: TYPE:

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 ---

Low Voltage Independent Occupancy/Vacancy Sensor with Power Pack and DALI Dimming Control



McWong
Powerpack: PSC-AC-100
Occupancy sensor: PSC-ID-CM-301

Leviton
Powerpack: OSP20-RD0
Occupancy sensor: OSC05-RMW

Powerpack: BZ-200
Occupancy sensor: DT-300/DT-305

IR-Tec Powerpack: PPU-300/301 Occupancy sensor: OS-361DT

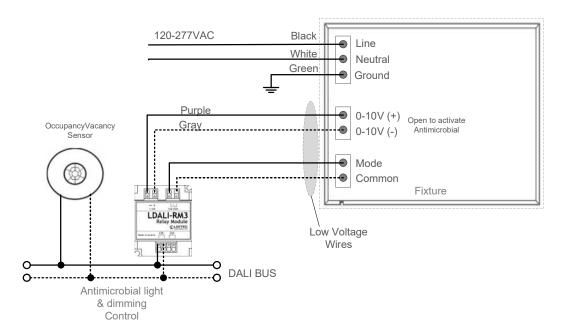
McWong
Powerpack: PSC-AC-PP-100
Occupancy sensor:PSC-ID-CM-301

Leviton
Powerpack: OSP20-RD0
Occupancy sensor: OSC05-RMW

Legrand/Wattstopper
Powerpack: BZ-200
Occupancy sensor: DT-300/DT-305

IR-Tec Powerpack: PPU-300/301 Occupancy sensor: OS-361DT

DALI Occupancy/Vacancy Sensor with DALI to 0-10V/Relay Module



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.

Linear Direct/Indirect LED with Vyv antimicrobial light



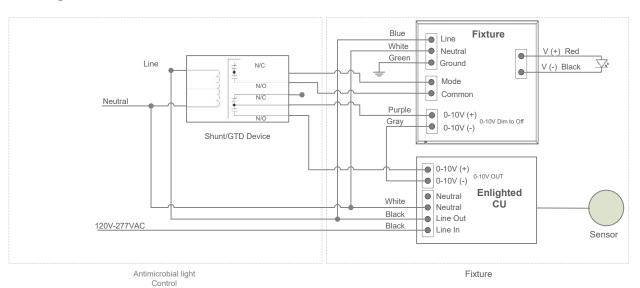
PROJECT: TYPE:

DIMMING COMPATIBILITY:

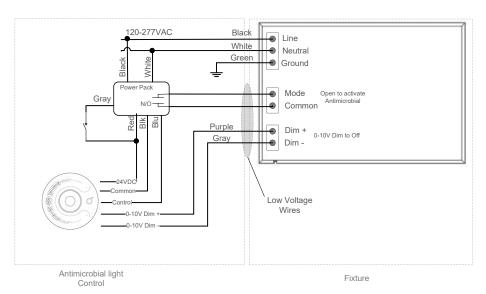
Amerlux® Linea fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc)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

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

0-10V with Enlighted Sensor Control



Delta Controls O3 Sensor Hub



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:

Emergency Fixture with Built-in Battery Pack (EMB) Wiring: Note: EMB not available on lengths under 4'.

