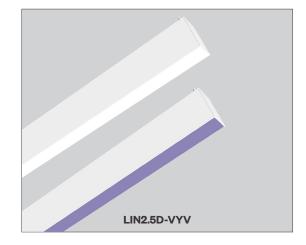
Linear Direct with Vyv Antimicrobial Light



PROJECT: TYPE:

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: Cable Suspended, Wall or Surface Mounted Linear, Direct

Wattage: 3W-16W/ft
Color Temp: 3000K, 4000K

ORI: 85 typ.

Dimming (wired): 0-10V, 1% dimming (standard)

Lutron LDE1 Hi-lume® 1% Dim Soft-On/Fade-to-Black

DALI dimming, 1% dim

Certifications









Fixture Summary

Performance Data

Wattage per Foot	Delivered Lumens	LPW	Color Temp	CRI
16	2615	41.5	4000K	85

Data is based on 4' fixture, 4000K, 85CRI IES files available on website.

Electrical Data

		4'		8'	
Wattage per Foot	Voltage	System Watts	Amps	System Watts	Amps
16	120V	62	0.52	124	1.0
10	277V	61.1	0.22	122.2	0.44
9	120V	34.1	0.29	68.3	0.57
	277V	34.2	0.13	67.4	0.25

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

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.

Linea[®] 2.5" Active CLEAN™



PROJECT:



Ordering Information LIN2.5D-VYV. 120/277 10 1 3 7 8 11 Model 2 Optics 3 Mounting 4 Wattage (per foot) LIN2.5D-VYV PL performance lens Pendant Mount (aircraft cable suspension) Wall Mount (ex. 16 - 16W/ft, avaiable in 3W-16W/ft, 3W/ft & 4W/ft require 4' min. lenght) ASW10 through ceiling tile or gyp WM wall mount board, white, 10' ASW20 through ceiling tile or gyp Surface Mount board, white, 20' SM surface mount 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' **Color Temp** Finish Voltage Length **Dual Mode** AW Active CLEAN™ white 120/277 DM30 3000K-85CRI, dual mode (2 circuit) white antimicrobial+light & violet enhanced antimicrobial DM40 4000K-85CRI, dual mode (2 circuit) white antimicrobial+light & violet enhanced antimicrobial 9 Configuration Drivers/Controls 11 Options/Accessories IND1 individual fixture, 2' to 8' in 1' increments OFF-0-10V 1% electronic dim to off, multi-volt, ENLS Enlighted Sensor (0-10V only and not available on 2' & 3' lengths) 120-277VAC constant current driver (standard) CON continuous run > than 8', specify to nearest foot HILUME-H-ECO Lutron LDE1 Hi-lume® 1% EMC-PF² emergency circuit requires power feed located dim Soft-On/Fade-to-Black in last fixture section (for other locations consult factory) CUS custom made to measure, ± 1/8" of customer supplied field dimensions DALI DALI dimming, 120-277VAC, 1% dim PF² extra power feed for additional circuiting Note: Review wiring diagrams on pages 8-11 for EMB emergency battery pack (not available for lengths controls requirements. under 4')

TYPE:

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

Not available with IND (individual) configuration

Linear Direct with Vyv Antimicrobial Light



PROJECT: TYPE:

Specifications

Application

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

Active CLEANTM 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

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.

 $\ensuremath{\text{\textbf{PL}}}$ - Performance Lens provides high efficiency with greater lens surface brightness.

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

Color Temperature Options: 3000K & 4000K

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 timpact through 405nm (*violet*) light. Switching can be controlled via switch, sensor or control system (see wiring diagrams) CRI: 85 typical; R9: 10 typical

4-step binning

Life: 36,000 hr., >70% of initial lumens (L70)

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.

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. Wattage: 3W-16W/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 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

AW - *Active*CLEAN $^{\text{TM}}$ 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.

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

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' cut to the nearest 1/8" exact length or a combination of a last 4' MoR with an EoR cut to exact length to the nearest 1/8".

Mounting

The Linea 2.5 Direct is intended to be pendant, wall, or surface mounted in continuous rows.

LIN2.5D-Vyv...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 $5^{\prime\prime}$ 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-Vyv....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-Vyv....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.

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

Warrant

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

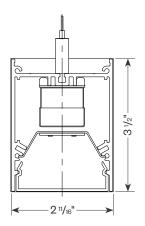


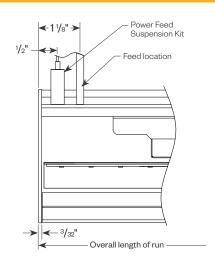


PROJECT: TYPE:

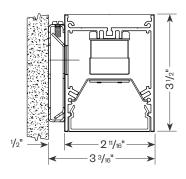
Product Details

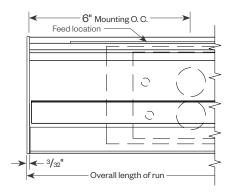
Pendant



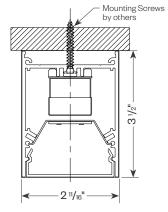


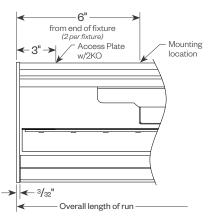
Wall Mount





Surface Mount



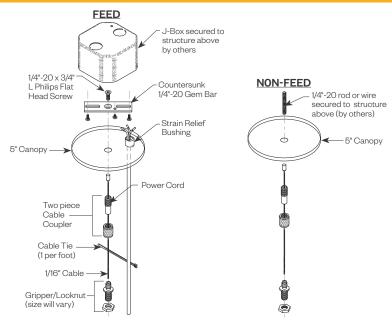






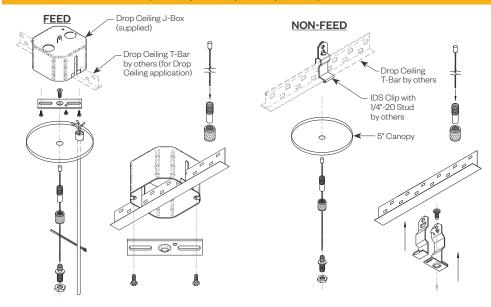
PROJECT: TYPE:

Cable Kit Suspension - 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 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)



Performance Data

Multiplying Factors: (Multiplying Factor is based on 3500K-83120V IES file on website)

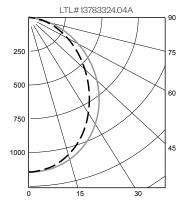
Wattage:	3W	4W	5W	6W	7W	8W	9W	10W	11W	12W	13W	14W	15W	16W
Factor:	0.19	0.25	0.31	0.38	0.44	0.50	0.56	0.63	0.69	0.75	0.81	0.88	0.94	1.0

CCT:	3000K	4000K
Factor:	1.0	1.0

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

Total Watts: 63; Total Lumens: 2615

Source: 182 White LEDs



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

RC		8	30	
RW	70	50	30	10
RCR				
0	119	119	119	119
1	109	105	101	97
2	100	92	86	80
3	92	82	74	68
4	84	73	65	58
5	78	66	57	51
6	72	59	51	45
7	67	54	46	40
8	63	50	41	36
9	59	46	38	32
10	55	42	35	29

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





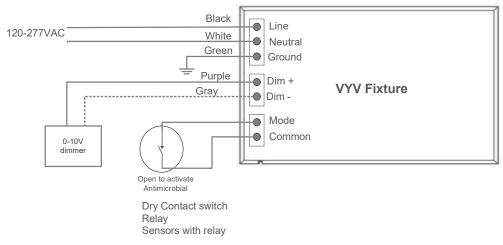
PROJECT: TYPE:

Dimming Compatibility

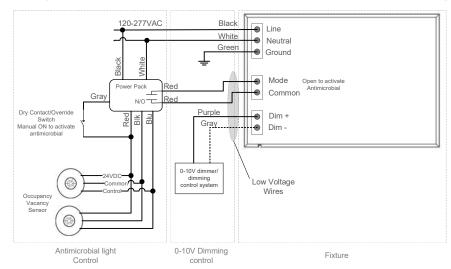
Amerlux® Linea® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc.)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

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

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

- * 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.





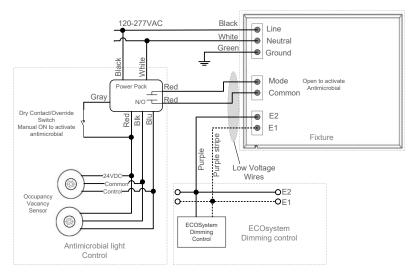
PROJECT: TYPE:

Dimming Compatibility (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 ---

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

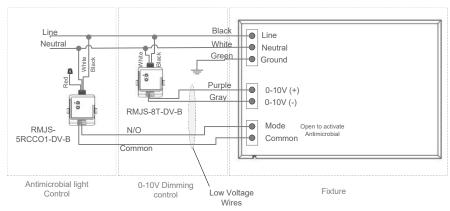


McWong Powerpack: PSC-AC-PP-100 Occupancy sensor:PSC-ID-CM-301 <u>Leviton</u>
Powerpack: OSP20-RD0
Occupancy sensor: OSC05-RMW

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

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)

- * 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.





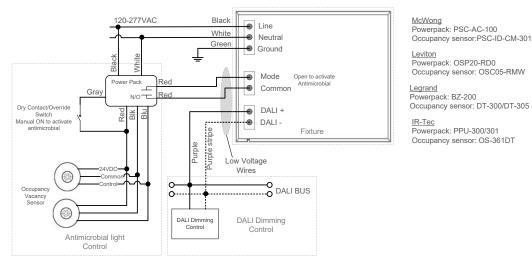
PROJECT: TYPE:

Dimming Compatibility (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 ---

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



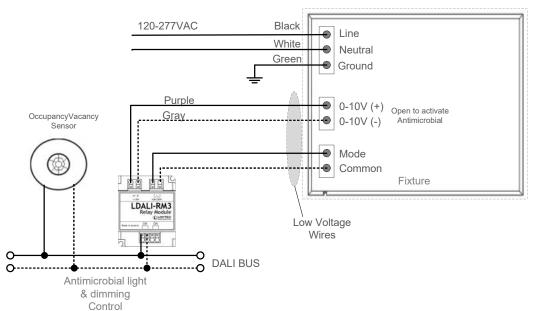
McWong Powerpack: PSC-AC-PP-100 Occupancy sensor:PSC-ID-CM-301

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



- * 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.







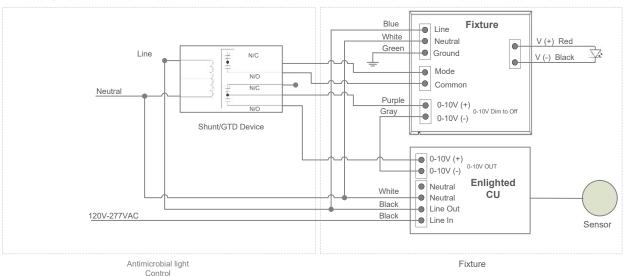
PROJECT: TYPE:

Dimming Compatibility (continued)

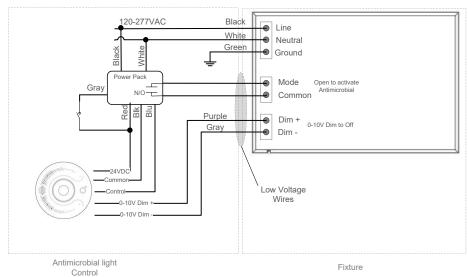
Amerlux® Linea® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc.)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

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

0-10V with Enlighted Sensor Control



Delta Controls O3 Sensor Hub



^{*} 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

EMERGENCY FIXTURE WITH BUILT-IN BATTERY PACK (EMB) WIRING: Note: EMB not available on lengths under 4'.

