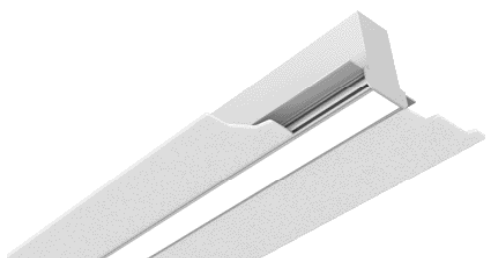


Grüv® 1.5" ActiveCLEAN™

Recessed Linear LED with Vyv antimicrobial light



Features

ActiveCLEAN'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 luminaires 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:	Recessed Direct
Wattage:	3W-12W/ft
Lumen Output:	1935 lm; 40.9 lm/W (12W, 4' fixture, 4000K)
Color Temp:	3000K, 4000K
CRI:	85 typ.
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)*

Ceiling Types

4" Tech Zone	6" Tech Zone	9/16"	15/16"	Gyp Board
Yes (FR only)	No	Yes	Yes (FLG-GRID only)	Yes

Millwork	Perimeter J-Mold
Yes	Yes

Performance Chart

Wattage Per Foot	Delivered Lumens	LPW	Color Temp
12	1935	40.9	4000K-80

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

Electrical Data

Wattage Per Foot		4'		8'	
		System Watts	Amps	System Watts	Amps
12	120V	46.3	0.39	93.9	0.78
	277V	45.9	0.17	91.9	0.33
7	120V	26.7	0.22	53.5	0.44
	277V	26.8	0.1	53	0.2

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



Grüv[®] 1.5" ActiveCLEAN[™]

Recessed Linear LED with Vyy antimicrobial light



PROJECT:

TYPE:

Ordering Information



- 1** Model
GRUV1.5-FLG-VYV - exposed flange
GRUV1.5-FLG-GRID-VYV - exposed flange, grid mount
GRUV1.5-FR-GRID-VYV - regressed lens grid
GRUV1.5-GB-VYV - gyp board trimless mud-in
GRUV1.5-GRID-VYV - grid mount
GRUV1.5-IS-VYV - independently suspended, millwork
GRUV1.5-J/GB-VYV - j-mold/gyp board trimless
GRUV1.5-J/GRID-VYV - j-mold/grid
GRUV1.5-J/IS-VYV - j-mold/independently suspended

- 2** Optics
PL - performance lens

- 3** Wattage (per foot)
_____ - (ex. 12 - 12W/ft, available in 3W/ft-12W/ft. 3 & 4W/ft require 4' min. length)

- 4** Color Temp
Single Mode
AL30 - 3000K-85CRI, white antimicrobial+light
AL40 - 4000K-85CRI, white antimicrobial+light

- 5** Finish
AW - ActiveCLEAN[™] white

- 6** Voltage
120/277

- 7** Length

- 8** Configuration
IND¹ - individual fixture, 2' to 8' in 1' increments
IND-S+ - individual with standard plus (see pg8, for GRID or J/GRID only)
CON - continuous run > than 8', specify to nearest foot
CON-S+ - continuous run with standard plus (see pg8, for GRID or J/GRID only)
CUS - custom made to measure, +/- 1/8" of customer supplied field dimensions

- 9** Drivers
OFF-0-10V - 1% electronic dim to off, multi-volt (120-277V) constant current driver (standard)
HILUME-H-ECO - Lutron "H" Series, 1% dim, fade to off, EcoSystem
DALI - DALI Dimming 120-277VAC, 1% dim
Note: Review wiring diagrams on pages 9-12 for controls requirements

- 10** Options/Accessories
CP - Chicago Plenum (CCEA)
ENLS - Enlighted Sensor (0-10V only and not available on 2' & 3' lengths; also not available for GRUV1.5-FR)
WHIP - 6' whip, 18/5 conductor
EMC-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 4')

DLC listed (4W fixture in 4', 5', 6', 7', 8' and runs to the nearest whole foot)

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

2 - Not available with IND (individual) configuration.

Grüv® 1.5" ActiveCLEAN™

Recessed Linear LED with Vyv antimicrobial light



PROJECT:

TYPE:

Specifications

Application

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

ActiveCLEAN™ 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 and trim. Die-formed, cold-rolled steel internal components and external mounting brackets. Numerous configurations accommodate most architectural ceiling conditions.

Optical

All lenses are snap-in, extruded acrylic, with a maximum length of 8'. Amerlux's proprietary acrylic lens provides excellent transmission while effectively concealing source image.

PL - Performance Lens provides high efficiency with controlled 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 mildew 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

Antimicrobial+Light Mode (AL_) provides continuous antimicrobial protection, combined with white light

CRI: 85 typical; **R9:** 10 typical
4-step bin

Life: 36,000 hr., >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 (46.5FC) calculation. All ActiveClean fixtures should be used in conjunction with standard cleaning practices.

Electrical

Wiring: Supply wires are easily accessible through access plate on top of fixture.

WHIP: Optional factory installed 6' Greenfield whip (18/5 conductor) simplifies installation.

Wattage: up to 12W/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

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

Optional Drivers:

HILUME-H-ECO - Lutron "H" Series, 1% dim, fade to off, EcoSystem
DALI - DALI Dimming 120-277VAC, 1% dim

Finish

AW - **ActiveCLEAN™** white powder coat paint with anti-microbial coating. Baked on finish for maximum durability and color stability.

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 "catch and latch" mechanisms out of sight, on top of the Housing. Wiring is made fast and positive with molded quick connectors.
S+ - Standard Plus is a field cuttable filler bracket that can be used when an Individual fixture or a Continuous run isn't to the nearest foot (+3/4" to 6" max per end). See page 7 for details.

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.

Mounting

Intended for use in gypsum board, 9/16" Tee grid and Screw Slot, and millwork ceilings. Wall mounting J-Molding details available. For individual, continuous row, or pattern applications.

Please note - fixtures to be installed before gypsum board ceiling.

GRUV1.5-FLG-VYV - exposed flange, fixture into gyp board ceiling

GRUV1.5-FLG-GRID-VYV - exposed flange grid mount, fixture into 9/16" Tee ceiling

GRUV1.5-FR-GRID-VYV - regressed lens grid, in 9/16" Screw Slot or Flat Tee ceilings (compatible with 4" TechZone™ & other 4" wide architectural ceiling systems)

GRUV1.5-GB-VYV - gyp trimless mud, fixture plastered into gypsum board ceiling

GRUV1.5-GRID-VYV - grid mount, in 9/16" Screw Slot or Flat Tee ceilings

GRUV1.5-IS-VYV - independently suspended, fixture in wood ceiling

GRUV1.5-J/GB-VYV - J mold/gyp trimless, plastered in ceiling - J Channel wall side

GRUV1.5-J/GRID-VYV - J mold/grid, in 9/16" Screw Slot or Flat Tee ceilings - J Channel wall side

GRUV1.5-J-IS-VYV - J mold/independently suspended in ceiling - J Channel wall side

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

Chicago Plenum (CCEA) optional

Warranty

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

Grüv[®] 1.5" ActiveCLEAN[™]

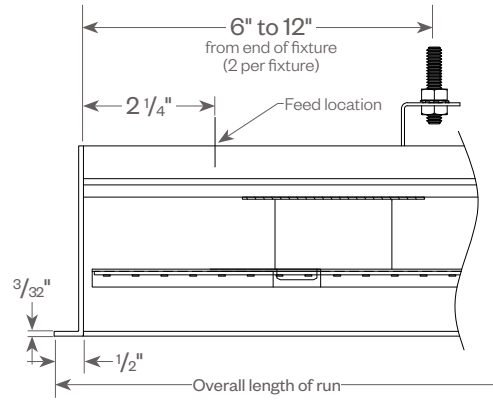
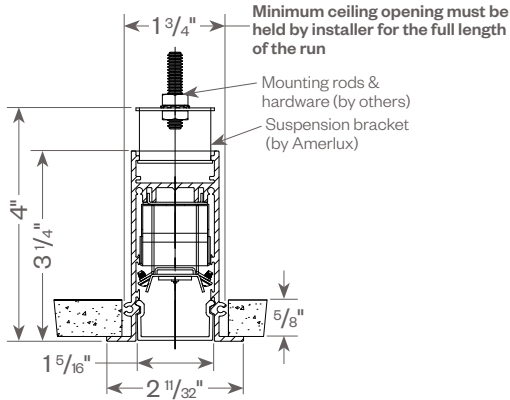
Recessed Linear LED with Vyv antimicrobial light



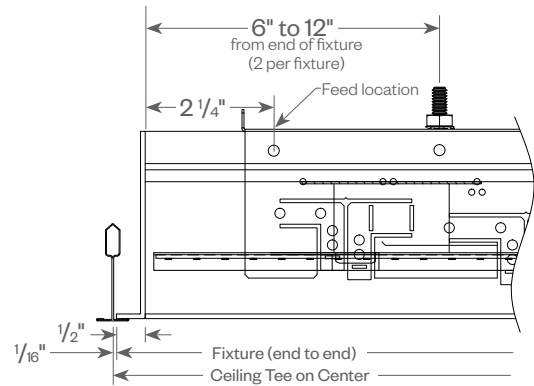
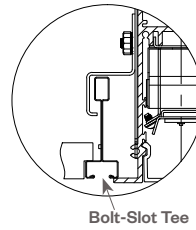
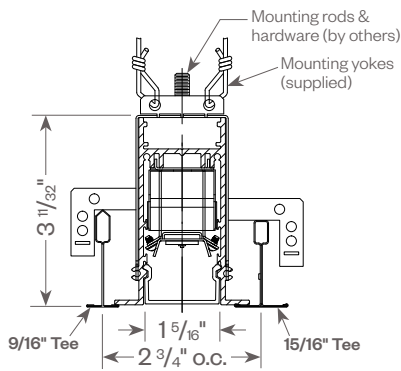
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TYPE:

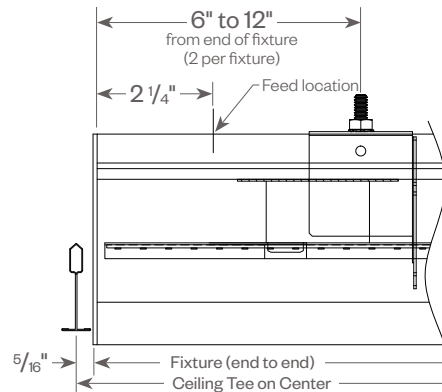
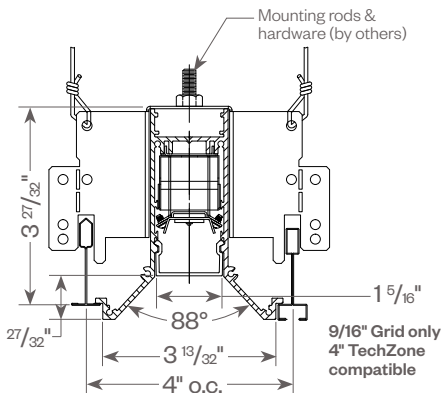
GRÜV1.5-FLG (exposed flange)



GRÜV1.5-FLG-GRID (flange, grid mount)



GRÜV1.5-FR-GRID (regressed lens, grid)



Grüv[®] 1.5" ActiveCLEAN[™]

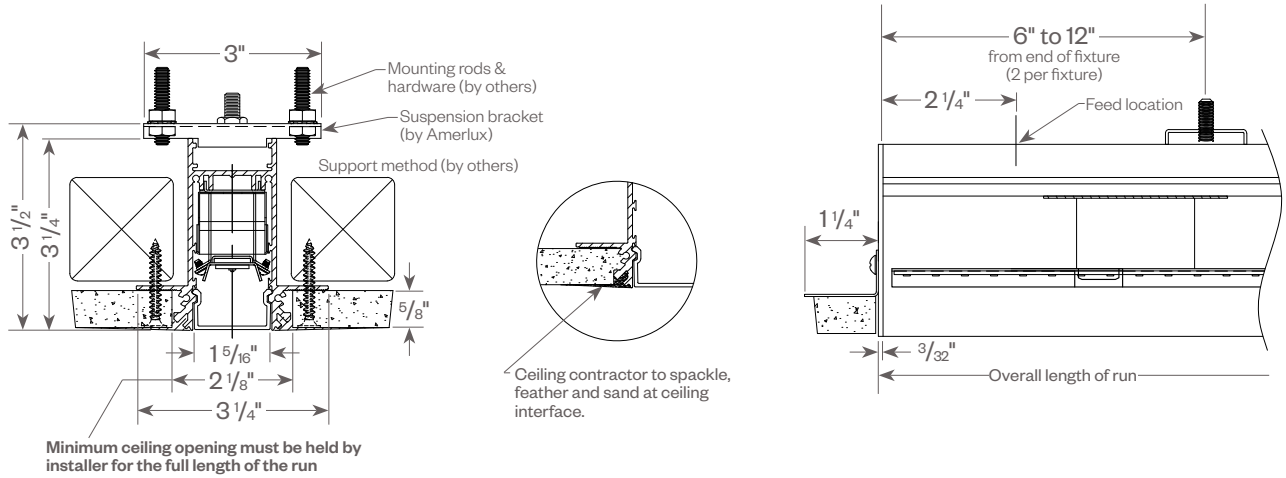
Recessed Linear LED with Vyy antimicrobial light



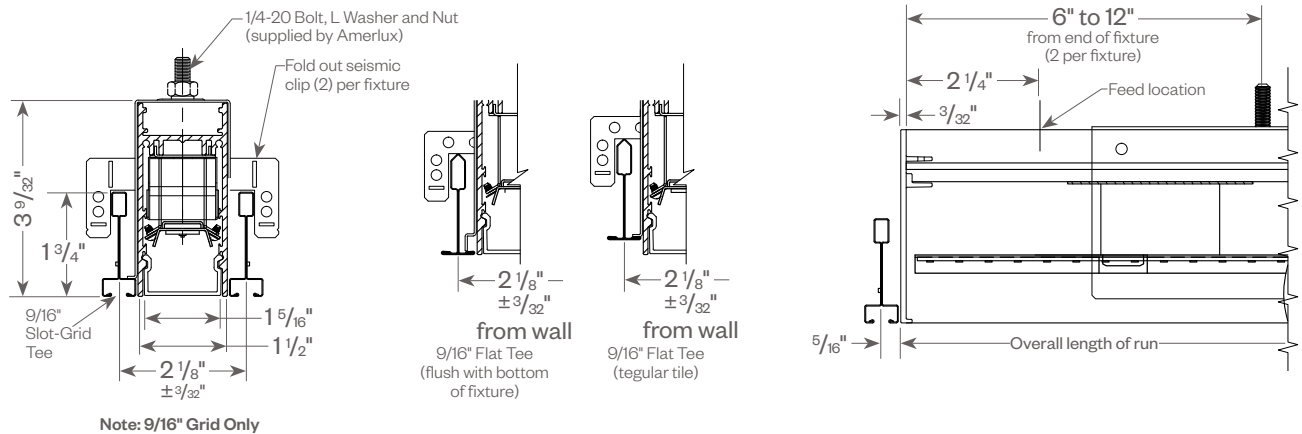
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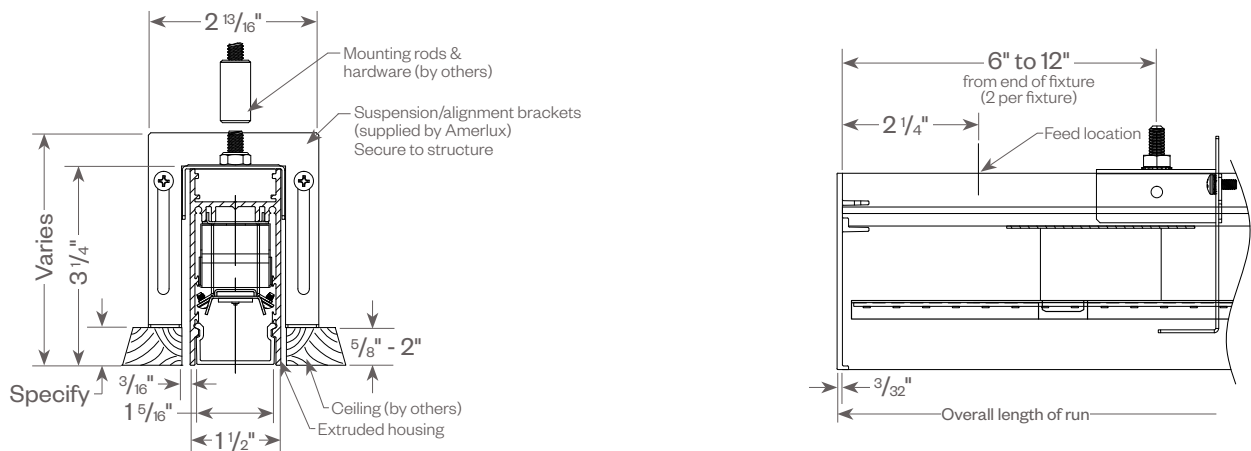
GRÜV1.5-GB (gyp board trimless mud-in)



GRÜV1.5-GRID (grid mount) Compatible (see pg 8)



GRÜV1.5-IS (independently suspended)



Grüv[®] 1.5" ActiveCLEAN[™]

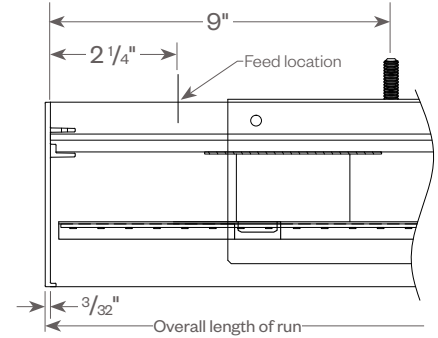
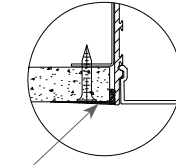
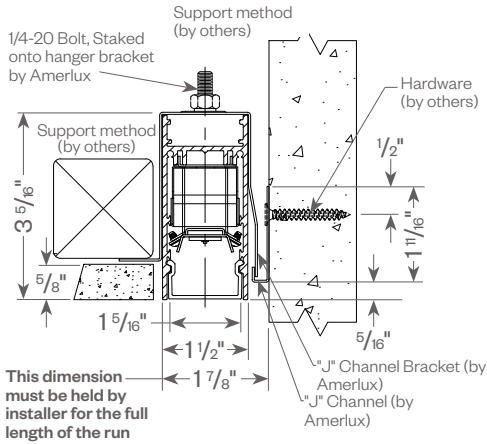
Recessed Linear LED with Vyy antimicrobial light



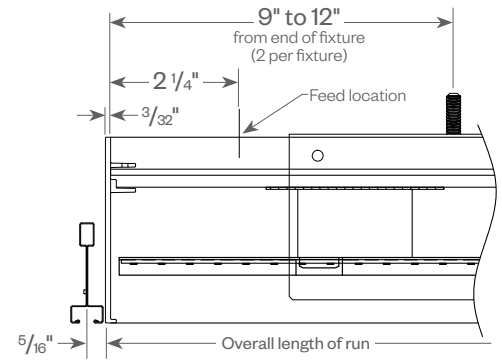
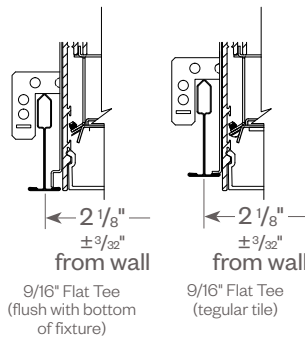
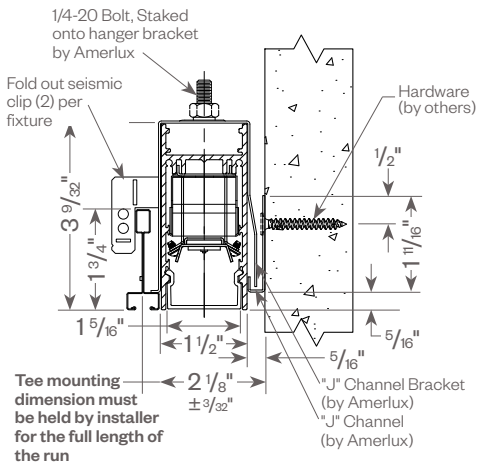
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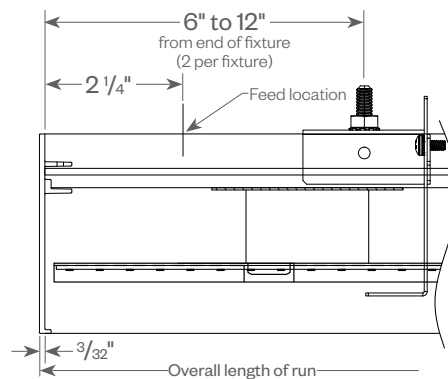
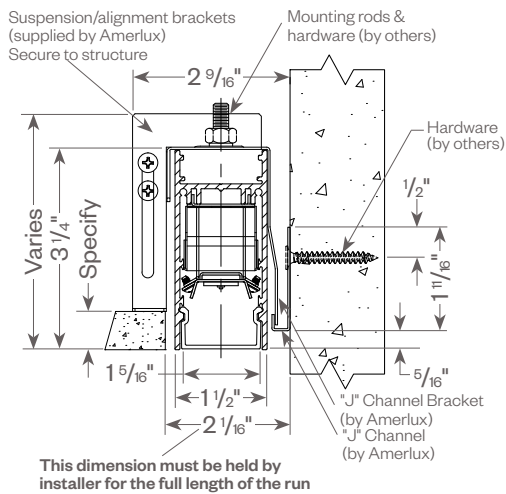
GRÜV1.5-J/GB (j-mold/gyp board trimless)



GRÜV1.5-J/GRID (j-mold/grid mount) + Compatible (see pg 8)



GRÜV1.5-J/IS (j-mold/independently suspended)



Grüv® 1.5" ActiveCLEAN™

Recessed Linear LED with Vyv antimicrobial light



PROJECT:

TYPE:

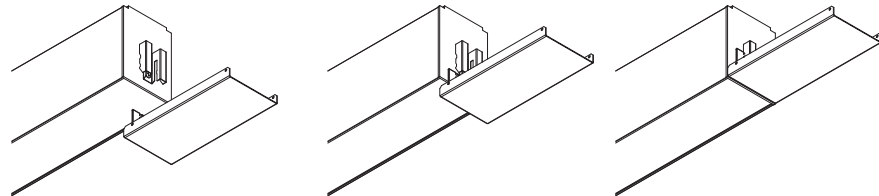


STANDARD PLUS (FILLER):

Whenever a continuous run is less than a foot to the next full foot length consider ordering Standard Plus field cuttable bracket for a perfect look. Fits 9/16" Slot Grid and 9/16" T grid. It snaps in place easily from below and gets you close to the wall with a standard fixture. Saves time and money compared to made-to-measure.

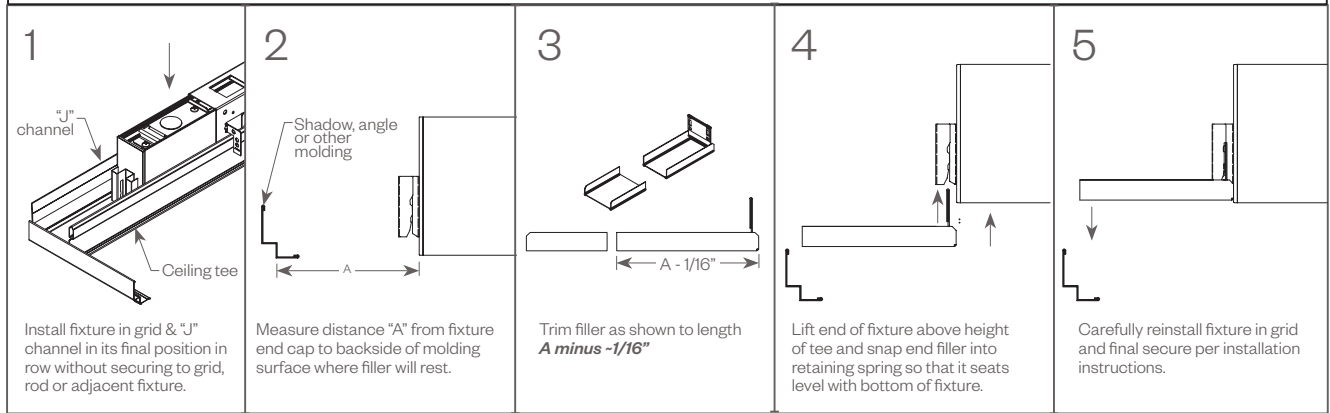


GRID VERSION



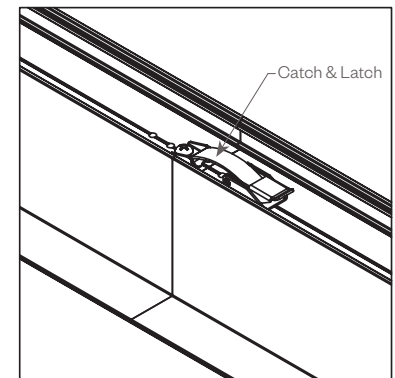
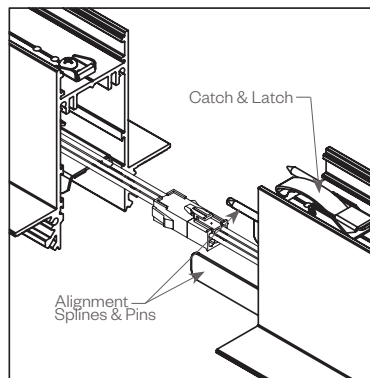
NOTE: Use with Gruv1.5-Grid and Gruv1.5-J/Grid

FILLER TRIM AND INSTALLATION (GRUV 1.5 GRID SHOWN HERE)



TOOLLESS JOINING:

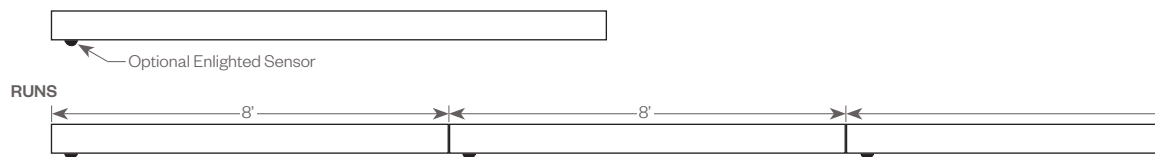
Line up the two housings by using the alignment splines & pins. Secure them together by using the Catch & Latch System on the top of the extrusion.



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. ENLS option is not available for use with GRUV1.5-FR

4 FT OR 8 FT DIRECT



Grüv[®] 1.5" ActiveCLEAN[™]

Recessed Linear LED with Vyy antimicrobial light



PROJECT:

TYPE:

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

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

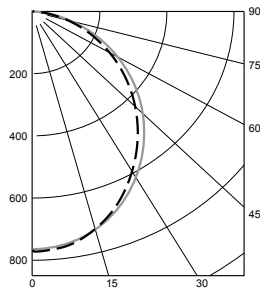
Wattage:	3W	4W	5W	6W	7W	8W	9W	10W	11W	12W
Factor:	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.83	0.92	1.0

CCT:	3000K	4000K
Factor:	1.0	1.0

GRUV 1.5" ACTIVECLEAN PL 12W/FT AL40 4000K 4FT

Total Watts: 47.3
Total Lumens: 1,935
Source: 182 White LED's

LTL# 13783324.02A



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	922	47.6
0-60	1564	80.8
0-90	1935	100.00
90-180	0	0.00

Total Luminaire Efficacy = 40.9 Lumens /Watt

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

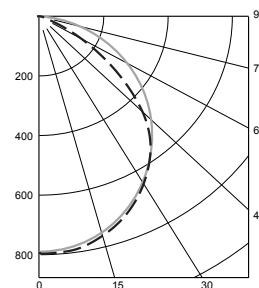
RC	80			
RW	70	50	30	10
RCR				
0	119	119	119	119
1	109	105	100	97
2	100	91	85	79
3	91	81	73	66
4	83	72	63	56
5	77	64	55	49
6	71	58	49	43
7	66	53	44	38
8	62	48	40	34
9	58	44	36	31
10	54	41	33	28

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

GRÜV1.5-FR ACTIVECLEAN PL 12W/FT AL40 4000K 4FT

Total Watts: 48
Total Lumens: 1,882
Source: 182 White LED's

LTL# 13783324.01A



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	981	52.1
0-60	1645	87.4
0-90	1882	100.0
90-180	0	0.0

Total Luminaire Efficiency = 39.1 Lumens /Watt

COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 20%

RC	80			
RW	70	50	30	10
RCR				
0	119	119	119	119
1	110	106	103	99
2	101	94	88	83
3	93	83	76	70
4	86	75	66	60
5	79	67	59	52
6	73	61	52	46
7	68	55	47	41
8	63	50	42	37
9	59	46	38	33
10	56	43	35	30

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

Grüv[®] 1.5" ActiveCLEAN[™]

Recessed Linear LED with Vyv antimicrobial light



PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux[®] Gruv 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:

- 120VAC or 277VAC*
- 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[†]:

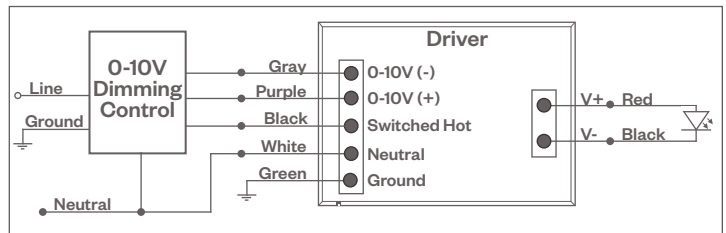
Wall Box

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 ECOSYSTEM DIMMING

Integrates into Lutron EcoSystem building management

Notes:

- 120VAC or 277VAC*
- Dims down to 1% light output
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Compatible Dimmers[†]:

Lutron ECO System

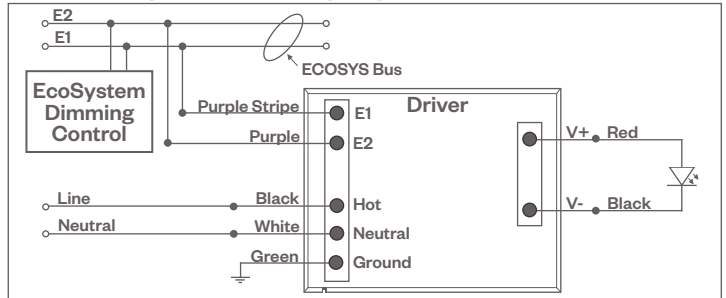
Pow Pak Dimming Modules
Energi Savr Node
Grafik Eye QS/Homeworks
QS Control Unit
Quantum Hub
Homeworks QS/My Room

Central System

Lutron EcoSystem compatible controls

HILUME-H-ECO

EcoSystem Digital Control Wiring Diagram



DALI - DALI DIMMING 120-277VAC

Digital control protocol allows individual fixture control

Notes:

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

Compatible Dimmers[†]:

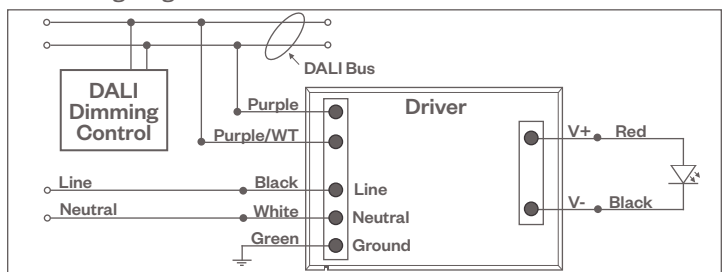
Wall Box

Leviton CD250 Controller

Center System

Dynalite
Fifth Light

DALI Wiring Diagram



Notes:

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

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

Grüv[®] 1.5" ActiveCLEAN[™]

Recessed Linear LED with Vyv antimicrobial light



PROJECT:

TYPE:

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

