

# Grüv® 4" High Efficiency Perimeter Cove

Recessed Linear LED



PROJECT:

TYPE:

## Features

Designed to provide high-performance, visually comfortable, high efficient comfortable perimeter ambient lighting with a 4" aperture for commercial and office environments. Featuring a choice of 2.5" or 4" regress options and ceiling interface options, Grüv4 HE Cove is an effective and aesthetically pleasing way of lighting space perimeters.



## Product Overview

Type:	Recessed Lens Direct	
Wattage:	5W/ft, 10W/ft (other wattages available see p2)	
Color Temp:	2700K, 3000K, 3500K, 4000K; Tunable White (2700K-5700K)	
CRI:	83 or 90+ typ. (2700K, 3000K, 3500K, 4000K) 90+ (Tunable White)	
Dimming (wired):	Static White 0-10V, 1% dimming (standard) Lutron LDE1 Hi-lume® 1% Dim Soft-On/Fade-to-Black DALI dimming, 1% dim	Tunable White 0-10V TW, 1% dimming DALI DT8, 1% digital dimming
Dimming (wireless):	Lutron Athena (integral wireless RF node)	Lutron Athena TW (integral wireless RF node)

## Certifications



## Fixture Summary

### Ceiling Types

9/16"	15/16"	Gyp Board	Millwork
Yes	CF	Yes	Yes

CF - consult factory.

### Performance Data (4' Fixture)

Nominal Wattage/Foot	Delivered Lumens	LPW	Color Temp-CRI
5	2182	121	3500K-83
10	4200	116.8	3500K-83

Data is based on 4' fixture with Performance lens, 3500K, 83CRI IES files available on website.

### Electrical Data

		4'		8'	
Wattage/Foot	Voltage	System Watts	Amps	System Watts	Amps
5	120V	18	0.15	36	0.30
	277V	18	0.07	36	0.13
10	120V	36	0.30	72	0.60
	277V	36	0.13	72	0.26

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

### Standard Patterns

Yes	Yes	Yes	Yes	Yes

\*Submit drawing, consult factory

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## Ordering Information

HW 120/277																											
1	2	3	4	5	6	7	8	9	10																		
1 Model <u>With 2.5" Regress Lens</u> EDR-6227-GRUV4-HE-J/GB-COVE-A16* j-mold/gyp board trimless EDR-6227-GRUV4-HE-J/GRID-COVE-A16* j-mold/grid EDR-6227-GRUV4-HE-J/FLG-COVE-A16* j-mold/flange  <u>With 4" Regress Lens</u> EDR-2182-GRUV4-HE-J/GB-COVE-A16* j-mold/gyp board trimless EDR-2182-GRUV4-HE-J/GRID-COVE-A16* j-mold/grid EDR-2182-GRUV4-HE-J/FLG-COVE-A16* j-mold/flange				2 Optics PL performance lens (standard) DL designer lens		3 Wattage (per foot) <table><tr><th>Standard</th><th>Optional</th></tr><tr><td>5 5W/ft</td><td>3 3W/ft*</td></tr><tr><td>10 10W/ft</td><td>4 4W/ft*</td></tr><tr><td></td><td>6 6W/ft</td></tr><tr><td></td><td>7 7W/ft</td></tr><tr><td></td><td>8 8W/ft</td></tr><tr><td></td><td>9 9W/ft</td></tr></table> * 4' min. length required				Standard	Optional	5 5W/ft	3 3W/ft*	10 10W/ft	4 4W/ft*		6 6W/ft		7 7W/ft		8 8W/ft		9 9W/ft				
Standard	Optional																										
5 5W/ft	3 3W/ft*																										
10 10W/ft	4 4W/ft*																										
	6 6W/ft																										
	7 7W/ft																										
	8 8W/ft																										
	9 9W/ft																										
4 Color Temp.-CRI Static White 27 2700K-83 279 2700K-90+ 30 3000K-83 309 3000K-90+ 35 3500K-83 359 3500K-90+ 40 4000K-83 409 4000K-90+ <u>Tunable White</u> TW9-2757 tunable white, 90CRI (2700K-5700K)		5 Finish HW high reflectance matte white		6 Voltage 120/277		7 Length <table><tr><th colspan="3">X</th></tr><tr><th>Length A</th><th>Length B</th><th>Length C</th></tr><tr><td>- all patterns</td><td>- all patterns</td><td>- PU</td></tr><tr><td>- IND</td><td>- PR (2 lengths of 2)</td><td>- PZ</td></tr><tr><td>- CON</td><td></td><td></td></tr><tr><td>- CUS</td><td></td><td></td></tr></table>				X			Length A	Length B	Length C	- all patterns	- all patterns	- PU	- IND	- PR (2 lengths of 2)	- PZ	- CON			- CUS		
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- IND	- PR (2 lengths of 2)	- PZ																									
- CON																											
- CUS																											
8 Configuration IND <sup>1</sup> 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 <u>Standard Patterns</u> (see pg 8 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 shape, (4) straight lengths + (4) 90° corners PZ Z shape, (3) straight lengths + (2) 90° corners				9 Drivers/Controls <u>Wired - Static White</u> O-10V 1% electronic dimming, multi-volt 120-277VAC, constant current driver (standard) HILUME-H-ECO Lutron LDE1 Hi-lume® 1% dim Soft-On/Fade-to-Black DALI DALI dimming 120-277VAC, 1% dim <u>Wired - Tunable White</u> O-10V-TW 1% dimming, multi-volt (120V-277V) constant current DALI-DT8 1% digital dimming, CCT control per DALI DT8 (120V-277V) constant current <u>Wireless - Static White</u> AWNRR-WH-SR Lutron Athena wireless node, RF only, white, D4i/DALI-2 AWNRR-BL-SR Lutron Athena wireless node, RF only, black, D4i/DALI-2 AWNRR-WH-010 Lutron Athena wireless node, RF only, white, 0-10V AWNRR-BL-010 Lutron Athena wireless node, RF only, black, 0-10V <u>Wireless - Tunable White</u> AWNRR-WH-SR-TW Lutron Athena wireless node, RF only, white, D4i/DALI-2 AWNRR-BL-SR-TW Lutron Athena wireless node, RF only, black, D4i/DALI-2				10 Options/Accessories CP Chicago Plenum (CCEA) WHIP 6' whip, 18/5 conductor EMC-PF <sup>2</sup> emergency circuit requires power feed located in last fixture section (for other locations consult factory)  PF <sup>2</sup> extra power feed for additional circuiting																			

\* 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.

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

<sup>2</sup> Not available with IND (*individual*) configuration.

# Grüv® 4" High Efficiency Perimeter Cove

## Recessed Linear LED



PROJECT:

TYPE:

### Specifications

#### Application

Commercial and retail recessed perimeter cove ambient lighting.

#### Construction

Heavy gauge steel upper housing is secured to aluminum extruded trim rails.  
Die-formed, cold-rolled steel internal components and external mounting brackets. Numerous configurations accommodate most architectural ceiling conditions.  
Die formed steel cove walls - powder coat painted.

#### 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 or constant view. Such as vertical wall mounted.

#### 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.

	Static White	Tunable White
<b>CCT:</b>	2700K, 3000K, 3500K, 4000K	2700K-5700K
<b>CRI:</b>	83 or 90+ typical	90+ (92 typ)
<b>R9:</b>	16 @ CRI 83; >50 @ CRI 90+	>50
<b>Life:</b>	50,000+ hr., > 70% of initial lumens (L70)	

#### 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.

**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.

#### Finish

**HW** - High reflectance, matte white powder coat paint. 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.

**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 8 for layouts.**

#### 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.**

**GRUV4-HE-J/GB-COVE** - J mold/gyp trimless, plastered in ceiling - J Channel wall side

**GRUV4-HE-J/GRID-COVE** - J mold/grid, in 9/16" Screw Slot or Flat Tee ceilings - J Channel wall side

**GRUV4-HE-J/FLG-COVE** - J mold/flange - J Channel wall side

#### Certifications

Approved to UL standards for damp locations as tested by CSA  
Intended for indoor use only  
Chicago Plenum (CCEA) optional

#### Warranty

Amerlux's 5 year limited warranty. Please consult Amerlux website for details.

# Grüv® 4" High Efficiency Perimeter Cove

## Recessed Linear LED

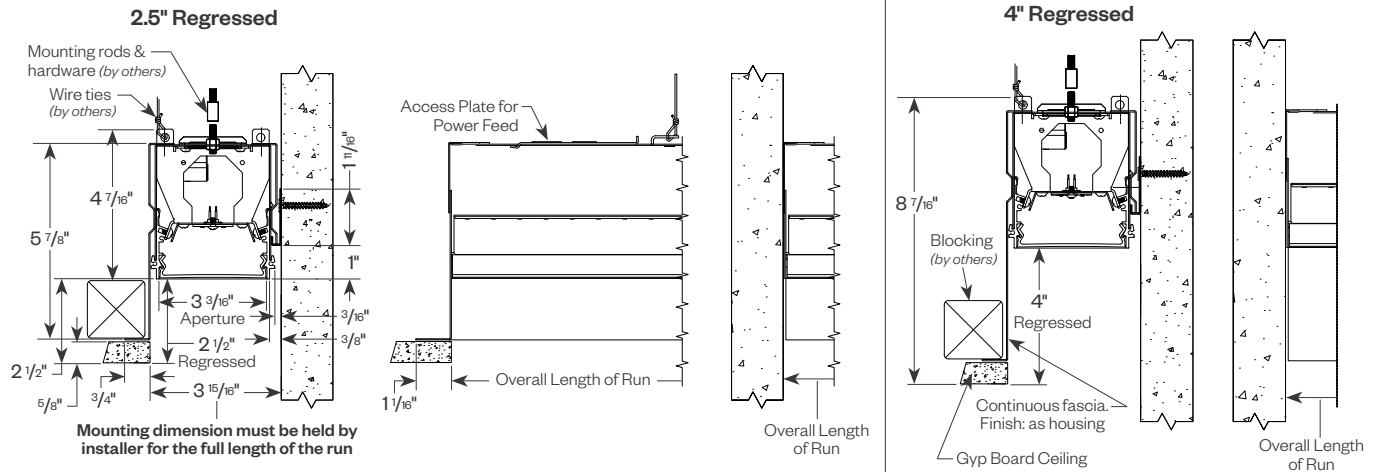


PROJECT:

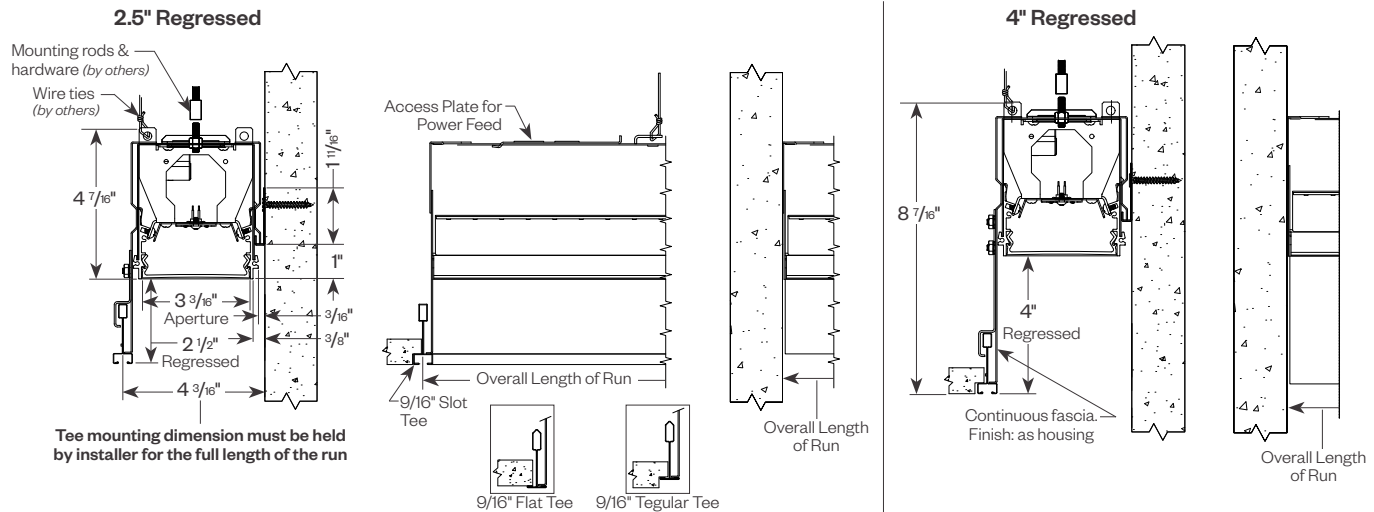
TYPE:

### Product Details

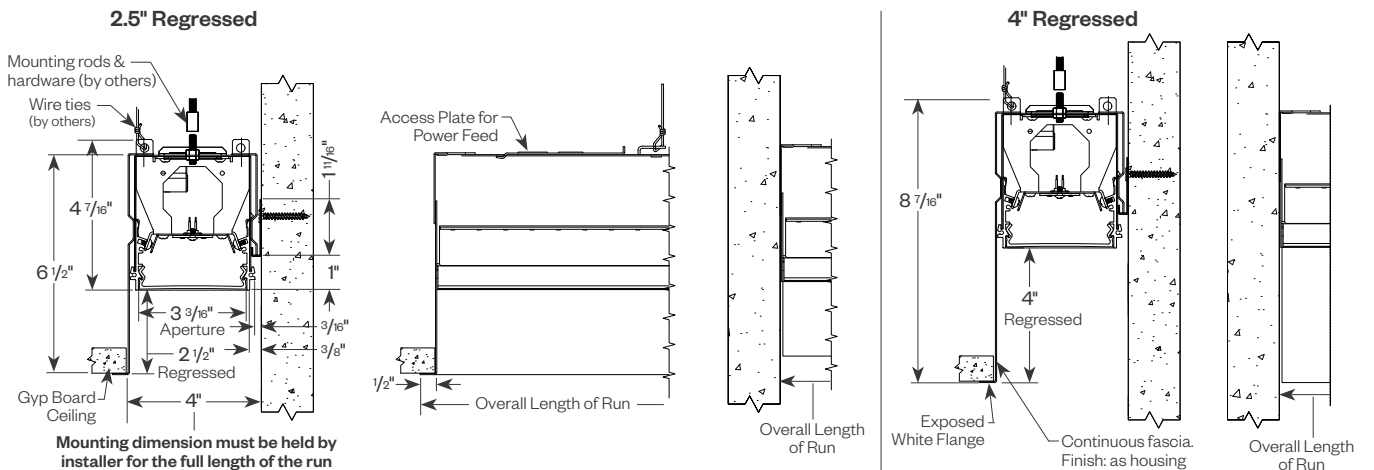
GRÜV4-HE-J/GB-COVE (j-mold/gyp board trimless)



GRÜV4-HE-J/GRID-COVE (j-mold/grid mount)



GRÜV4-HE-J/FLG-COVE (j-mold/flange)



Delta Intelligent Building Technologies

# Grüv® 4" High Efficiency Perimeter Cove

Recessed Linear LED



PROJECT:

TYPE:

## Grüv 2.5" Patterns

### Standard Patterns

All corners are standard 90°, standard length legs.

Use standard lengths: 4' min to 8' in 1 foot increments.

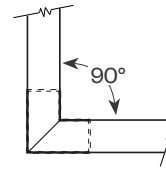
Continuous runs must be the same length in pairs for closed configuration.

### Custom Patterns

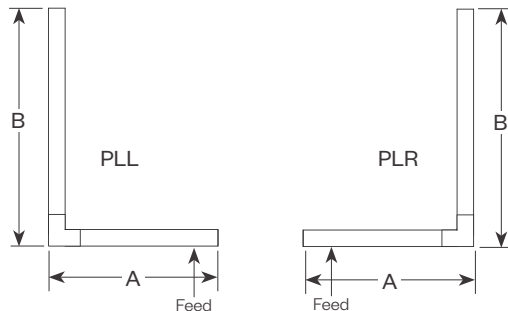
Please provide drawings of your configuration.

Made to Measure: +/- 1/8", consult factory.

PC - custom pattern, please provide drawings and consult factory



**Grüv 2.5 Lens**  
Mitered Lens

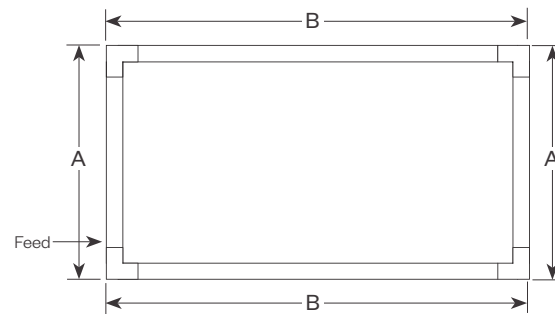


**PLL** - L Left, (2) straights + (1) 90° corner, leg right

**PLR** - L Right, (2) straights + (1) 90° corner, leg left

Provide overall lengths: A' & B'

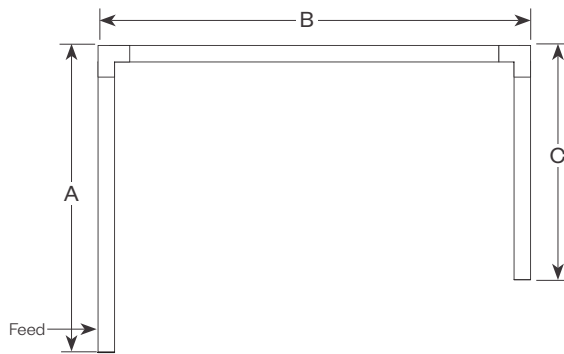
Nomenclature: A-B-PLL      A-B-PLR



**PR** - Closed Rectangle, (4) straight lengths + (4) 90° corners

Provide overall lengths: A' & B'

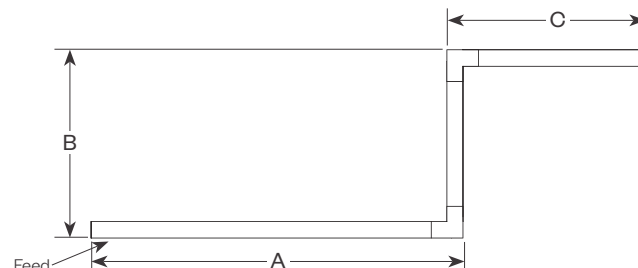
Nomenclature: A-B-PR



**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

# Grüv® 4" High Efficiency Perimeter Cove

## Recessed Linear LED



PROJECT:

TYPE:

### Performance Data

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

Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.31	0.42	0.53	0.63	0.72	0.81	0.90	1.0

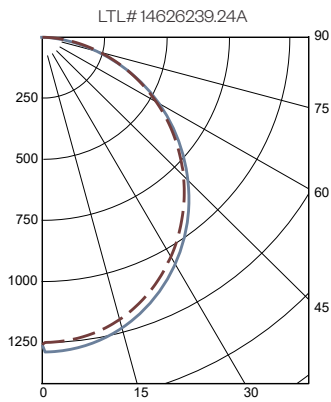
CCT Factors:				
CRI	2700K	3000K	3500K	4000K
83	0.92	0.97	1.0	1.02
90	0.81	0.84	0.86	0.89

#### GRÜV 4" HE PERFORMANCE LENS 10W 3500K 4FT

Total Watts: 36

Total Lumens: 4200

Source: 128 White LED's



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	2087	49.7
0-60	3448	82.1
0-90	4200	100.0
90-180	0	0.0

**Efficacy (lumens/watt) = 116.8 lm/W**

#### COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
ROR				
0	119	119	119	119
1	109	105	101	97
2	100	92	86	80
3	92	81	74	67
4	84	73	64	58
5	78	65	56	50
6	72	59	50	44
7	67	54	45	39
8	62	49	41	35
9	58	45	37	32
10	55	42	34	29

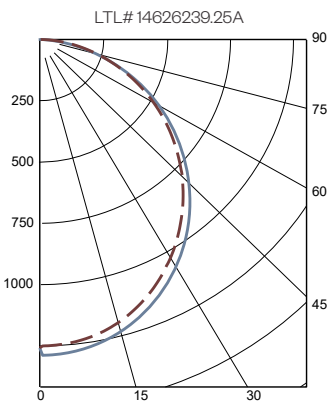
Note: Values expressed as % of total lumen output delivered to the task surface.

#### GRÜV 4" HE DESIGNER LENS 10W 3500K 4FT

Total Watts: 36

Total Lumens: 3510

Source: 128 White LED's



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1576	44.9
0-60	2758	78.6
0-90	3510	100.0
90-180	0	0.0

**Efficacy (lumens/watt) = 97.6 lm/W**

#### COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
ROR				
0	119	119	119	119
1	109	104	99	96
2	99	90	83	78
3	90	79	71	65
4	82	70	61	55
5	76	63	54	47
6	70	57	48	41
7	65	51	42	36
8	60	47	38	32
9	56	43	35	29
10	53	40	32	26

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

# Grüv® 4" High Efficiency Perimeter Cove

## Recessed Linear LED



PROJECT:

TYPE:

### Static White - 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 ---

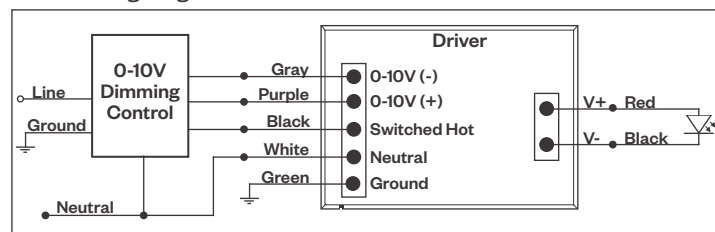
#### 0-10V - DIMMING (Standard)

Integrates into a variety of building management and daylighting controls

##### Notes:

- 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!**

#### 0-10V Wiring Diagram



#### Compatible Dimmers†:

Wall Box			Central System
Lutron:	Wattstopper:	Leviton:	Lutron Grafik Eye with GRX-TV1 Interface
Diva - DVSTV	ADF-120277	Renoir II	
Maestro - MS-Z101			
Nova-T - NTSTV-DV			

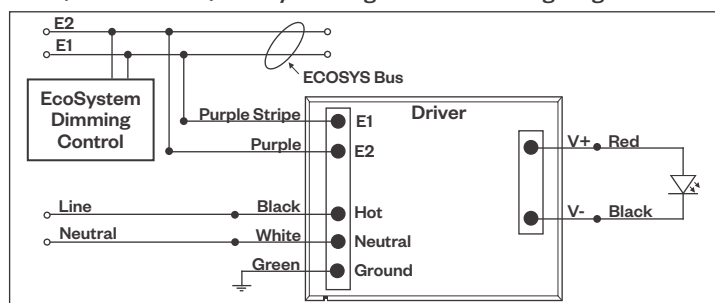
#### LUTRON LDE1 DIMMING

Integrates into Lutron EcoSystem building management

##### Notes:

- 120VAC or 277VAC\*
- Dims down to 1% Soft-On/Fade-to-Black
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - **DO NOT SHARE NEUTRALS!**

#### LDE1 (HILUME-H-ECO) EcoSystem Digital Control Wiring Diagram



#### Compatible Dimmers†:

Lutron ECO System	Central System
Pow Pak Dimming Modules	Lutron EcoSystem compatible controls
Energi Savr Node	
Grafik Eye QS/Homeworks	
QS Control Unit	
Quantum Hub	
Homeworks QS/My Room	

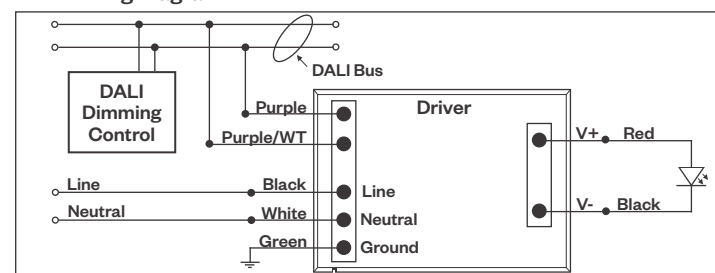
#### DALI - DALI DIMMING 120V-277V

Digital control protocol allows individual fixture control

##### Notes:

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

#### 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® 4" High Efficiency Perimeter Cove

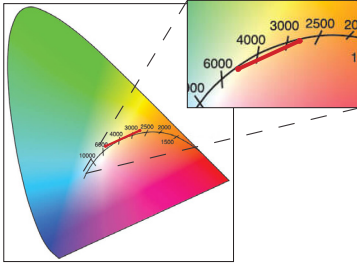
Recessed Linear LED



PROJECT:

TYPE:

## Tunable White



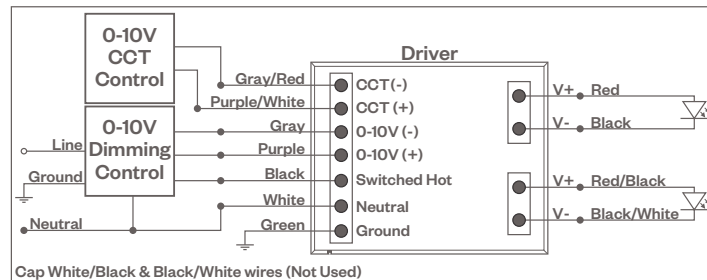
Tunable White range from 2700K-6700K, 90 CRI.  
See wiring diagrams below.

## Tunable White - Dimming Compatibility

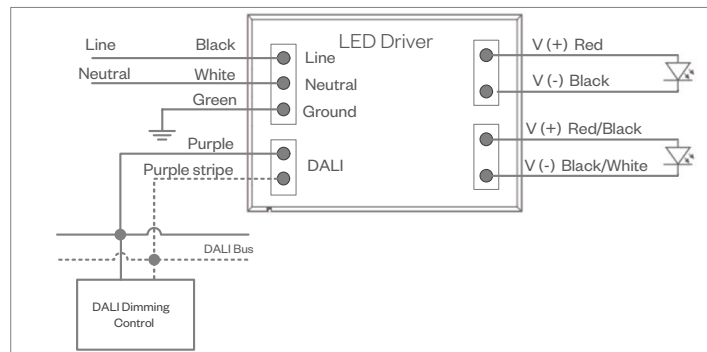
Amerlux® Gruv fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (*Dimmer, Fixture Quantity, Voltage, etc*)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

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

### 0-10V Wiring Diagram



### DALI DT8 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.



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