# Grüv® 4" High Efficiency **Perimeter Cove**

Recessed Linear LED





### **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, Gruv4 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) Lumen Output: 3,794 max; 100.1 Lm/W (10W, 4ft fixture)

2700K, 3000K, 3500K, 4000K Color Temp:

CRI: 83 typ. or 90+ typ

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

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

DALI dimming, 1% dim

# **PROJECT:**

## TYPE:

# Fixture Summary (see following pages for more information)

## **Ceiling Types**

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

<sup>\*</sup>Consult factory

#### **Performance Chart**

Wattage Per Foot	Delivered Lumens	LPW	Color Temp	
5	2,148	107.0	3500K	
10	3,794	100.1	3500K	

Data is based on 3500K-83 IES files available on website Data is based on 4' fixture with performance lens

### **Electrical Data**

		4'	1	8	•
Wattage Per Foot		System Watts	Amps	System Watts	Amps
5	120V	22.3	0.18	41.9	0.35
Ö	277V	22.9	0.09	41.6	0.16
10	120V	42.1	0.30	84.2	0.70
10	277V	41.5	0.15	83.0	0.30

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



Recessed Linear LED



PROJECT: TYPE:

**Ordering Information** 

1 2 3 4 5 6 7 8 9 10

1 Model 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

2 Optics

PL - performance lens (standard)

**DL** - designer lens

3 Wattage (per foot)

Standard:

5 - 5W/ft

10 - 10W/ft

Optional:

3 - 3W/ft (4' minimum length required)

4 - 4W/ft (4' minimum length required)

6 - 6W/ft

7 - 7W/ft

8 - 8W/ft

9 - 9W/ft

Color Temp

 83 CRI:
 90+ CRI:

 27 - 2700K-83
 279 - 2700K-90+

 30 - 3000K-83
 309 - 3000K-90+

 35 - 3500K-83
 359 - 3500K-90+

 40 - 4000K-83
 409 - 4000K-90+

Finish

HW - high reflectance white

6 <u>Voltage</u> 120/277

7 Length

>	<x< th=""><th></th></x<>	
(Length A)	(Length B)	(Length C)
Length A (used for)	Length B (used for)	Length C (used for)
- all patterns	- all patterns	- PU
- IND	- PR - 2 lengths	- PZ
- CON	of2	
- CUS		

8 Configuration

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

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

**CUS** - oustom made to measure, +/- 1/8" of oustomer supplied field dimensions

Standard Patterns (see page 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, (4) straight lengths + (4) 90° corners

PZ - Z shape, (3) straight lengths + (2) 90° corners

9 Drivers

**0-10V** - 1% electronic dimming, 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

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

<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.

<sup>†</sup> 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.

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 sorew driver.

 $\textbf{Color Temperature Options:}\ 2700\text{K}, 3000\text{K}, 3500\text{K}, 4000\text{K}$ 

CRI: 83 typical, 90+ typical

R9: 16 @ CRI 83 R9: >50 @ CRI 92

Life: 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

**CUS** - Custom made to measure runs are made to nearest 1/8" of custome 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'  $\&\ R'$ 

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

 $\mbox{A'-B'-PR}$  - Rectangle - (4) 90° Corners joining 4 segments. Specify overall segments: A' & B'

 $\mbox{A'-B'-C'-PU}$  - 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', & O'

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.

<u>Please note</u> - fixtures to be installed before gypsum board ceiling. GRUV4-HE-J/GB-COVE - J mold/gyp trimless, plastered in ceiling - J Channel wall side

 ${\bf GRUV4\text{-}HE\text{-}J/GRID\text{-}COVE}$  - J mold/grid, in 9/16" Sorew 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 OSA Intended for indoor use only

Chicago Plenum (CCEA) optional

#### Warranty

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

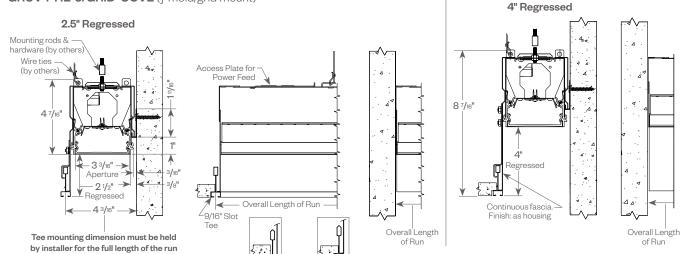
Recessed Linear LED



## PROJECT: TYPE:

#### GRÜV4-HE-J/GB-COVE (j-mold/gyp board trimless) 4" Regressed 2.5" Regressed Mounting rods & hardware (by others) Wire ties Access Plate for (by others) Power Feed 8 7/16 4 Blocking 5 7/8 by others 4' 3 3/16" -> Aperture - 2 ¹/2" → Regressed Overall Length of Run Continuous fascia 3 15/16" Finish: as housing Overall Length Overall Length Mounting dimension must be held by └ Gyp Board Ceiling of Run of Run installer for the full length of the run

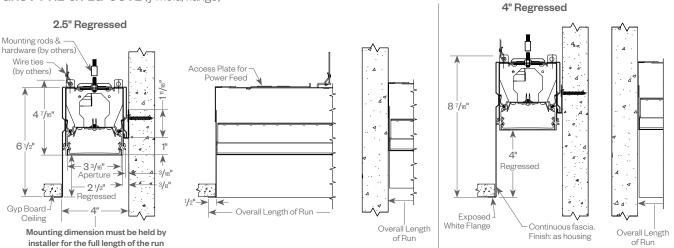
## GRÜV4-HE-J/GRID-COVE (j-mold/grid mount)



9/16" Tegular Tee

9/16" Flat Tee

## GRÜV4-HE-J/FLG-COVE (j-mold/flange)



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PROJECT: TYPE:

#### **GRUV 4" 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**

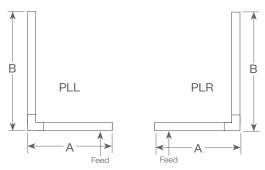
Please provide drawings of your configuration.

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

PC - custom pattern, please provide drawings and consult factory



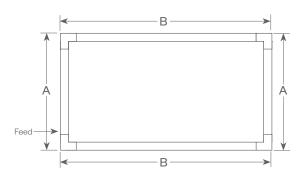
**Gruv 4 Lens** Mitered Lens



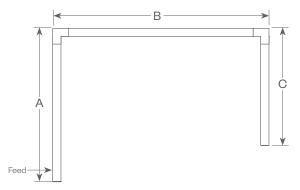
PLL - L Left, (2) straights + (1) 90° corner, leg right PLR - L Right, (2) straights + (1) 90° corner, leg left

Provide overall lengths: A' & B'

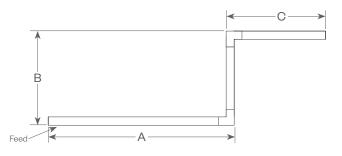
Nomenclature: A-B-PLL A-B-PLR



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

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PROJECT: TYPE:

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

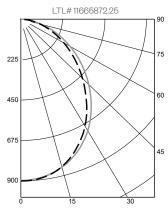
**MULTIPLYING FACTORS:** (Multiplying Factor is based on 3500K-83120V IES file on website)

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

CCT-CRI:	2700K-83	3000K-83	3500K-83	4000K-83	2700K-90+	3000K-90+	3500K-90+	4000K-90+
Factor:	0.91	0.96	1.0	1.01	0.80	0.84	0.88	0.89

#### GRÜV 4" HE PERFORMANCE LENS 5W 3500K 4FT

Total Watts: 20 Total Lumens: 2,148 Source: 120 White LED's



### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1074	50.0
0-60	1769	82.4
0-90	2148	100.0
90-180	0	0.0

Luminaire Efficacy = 107.0 lm/w

#### COEFFICIENTS OF UTILIZATION

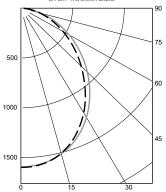
RC		8	0	
RW	70	50	30	10
RCR				
0	2497	2497	2497	2497
1	2292	2204	2125	2053
2	2093	1939	1811	1703
3	1915	1718	1562	1437
4	1760	1533	1364	1233
5	1625	1379	1204	1073
6	1505	1249	1073	945
7	1400	1138	965	842
8	1307	1043	874	756
9	1224	961	797	684
10	1151	890	731	623

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

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

Total Watts: 38 Total Lumens: 3,794 Source: 120 White LED's

LTL#11665872.26



#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fix
0-40	1899	50.1
0-60	3126	82.4
0-90	3795	100.0
00 100	0	00

Luminaire Efficacy = 100.1 lm/w

#### COEFFICIENTS OF UTILIZATION

RC		8	SO.	
RW	70	50	30	10
RCR				
0	4412	4412	4412	4412
1	4049	3894	3754	3628
2	3697	3427	3201	3009
3	3384	3035	2761	2540
4	3110	2709	2411	2180
5	2871	2437	2128	1897
6	2660	2207	1897	1672
7	2474	2011	1705	1488
8	2310	1844	1545	1337
9	2164	1699	1409	1210
10	2034	1573	1292	1103

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

Recessed Linear LED



PROJECT: TYPE

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

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

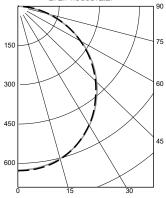
Wattage:	3W	4W	5W	6W	7W	8W	9W
Factor:	0.63	0.82	1.0	1.17	1.34	1.50	1.64

CCT-CRI:	2700K-83	3000K-83	3500K-83	4000K-83	2700K-90+	3000K-90+	3500K-90+	4000K-90+
Factor:	0.91	0.96	1.0	1.01	0.80	0.84	0.88	0.89

#### GRÜV 4" HE DESIGNER LENS 5W 3500K 4FT

Total Watts: 20 Total Lumens: 1,777 Source: 120 White LED's

LTL# 11665872.27



#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixt
0-40	794	44.7
0-60	1393	78.4
0-90	1776	100.0
90-180	0	0.0

Luminaire Efficacy =  $88.6 \, \text{Im/w}$ 

#### COEFFICIENTS OF UTILIZATION

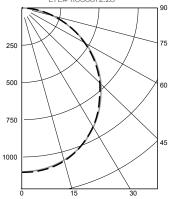
RC	80			
RW	70	50	30	10
RCR				
0	2066	2066	2066	2066
1	1880	1802	1732	1668
2	1706	1571	1458	1362
3	1553	1379	1244	1134
4	1421	1223	1076	962
5	1306	1094	942	829
6	1207	986	834	725
7	1120	895	746	640
8	1043	817	672	571
9	976	751	610	514
10	916	694	558	467

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

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

Total Watts: 38 Total Lumens: 3,127 Source: 120 White LED's

LTL# 11665872.28



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1395	44.6
0-60	2451	78.4
0-90	3127	100.0
90-180	0	0.0

Luminaire Efficacy = 82.5 lm/w

#### COEFFICIENTS OF UTILIZATION

COLITICIENTO OF CHEIZATION					
RC		80			
RW	70	50	30	10	
RCR					
0	3636	3636	3636	3636	
1	3310	3172	3048	2936	
2	3002	2764	2565	2396	
3	2732	2427	2188	1995	
4	2500	2151	1892	1692	
5	2298	1924	1657	1458	
6	2123	1734	1467	1274	
7	1970	1573	1311	1125	
8	1835	1437	1182	1004	
9	1716	1320	1073	904	
10	1611	1220	981	820	

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

Recessed Linear LED



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

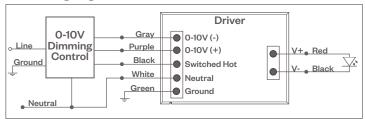
#### Notes:

- 120V or 277V\*
- Dims down to 1% light output
- · Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

### Compatible Dimmers<sup>†</sup>:

Wall Box		
Lutron:	Wattstopper:	Leviton:
Diva - DVSTV	ADF-120277	Renoir II
Maestro - MS-Z101		
Nova-T - NTSTV-DV		

#### 0-10V Wiring Diagram



#### Center System

Lutron Grafixk Eye with GRX-TV1 Interface

#### **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!

#### Compatible Dimmers<sup>†</sup>:

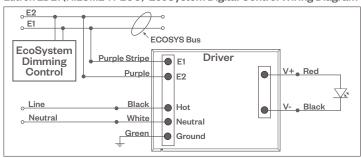
### Lutron ECO System

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

#### Lutron LDE1 (HILUME-H-ECO) EcoSystem Digital Control 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.

Recessed Linear LED



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 ---

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

Digital control protocol allows individual fixture control

### Notes:

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

### Compatible Dimmers<sup>†</sup>:

Wall Box

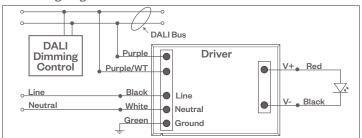
Leviton CD250 Controller

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.