GEMINI 4000 Wall Light

Job Name:		Type:	
Contractor:		Sheet:	

Features

- Cost effective solution for illuminating auditorium stairways along walls
- Eliminates need to install lights on each individual step
- Also ideal for pathways and corridors
- Effectively illuminates steps and paths up to 5 feet wide
- Light levels satisfy requirements set forth in Life Safety Code of National Fire Protection Agency (NFPA)
- UL Listed as Low Voltage Lighting System
- Standard 2 year warranty; extended warranty available with approved installers

LED Light Source

- LED modules spaced 12 inch on center (Consult factory for other spacings)
- Available in Amber, Red, and White LEDs
- Consult factory for other color combinations.
- Modules consume only 0.3W each and run on safe 12V DC power
- Rated for 30,000 hours and individually replaceable
- Dimmable with accompanying power supply (See Power Supplies)
- Available with optional louvers and inserts for minimizing glare and scalloping along stairways
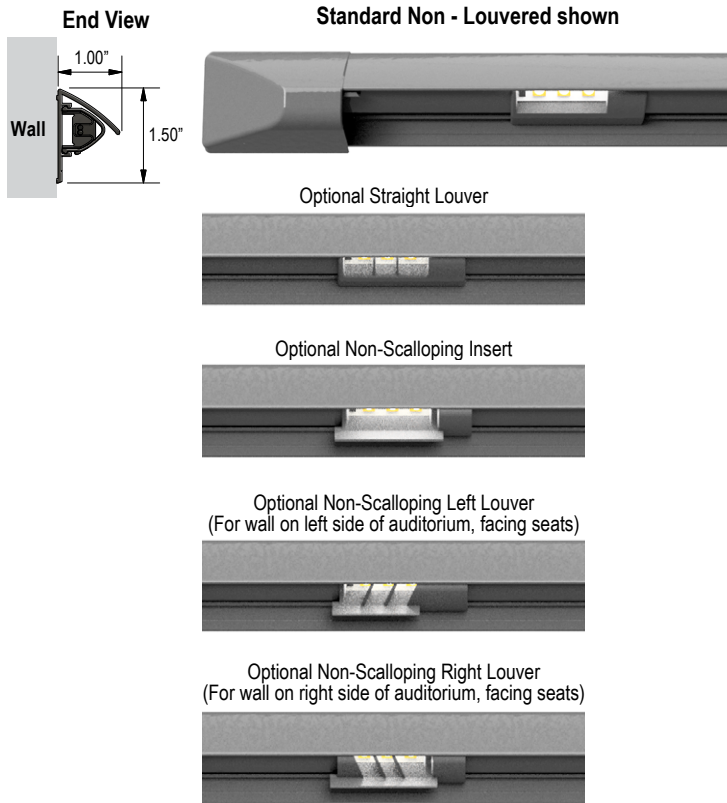
Fixture Design

- Low profile is ADA compliant and provides unobtrusive illumination
- Lens-less design allows unhindered projection of light, maximizing output
- Aluminum housing ensures structural integrity of fixture against uneven wall surfaces
- Black anodized finish provides added protection against corrosion (Consult factory for other finishes)
- Molded PVC end caps match fixture contours for finished look
- Elbows available for inside and outside corners
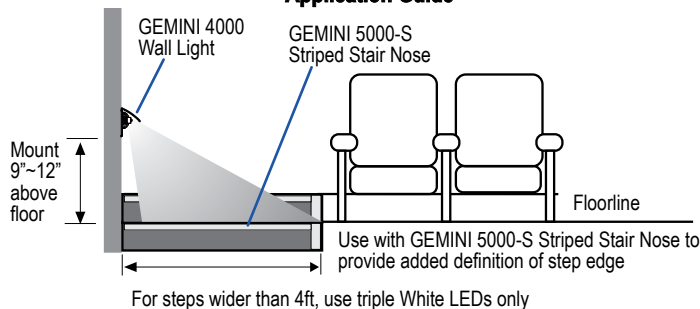- Angled couplings available for transitions in grade

Installation

- Fixtures are factory pre-assembled and can be mounted directly to wall for quick and easy installation
- Ships in standard 5 ft or 10 ft sections; can be cut to length
- Mount 9 ~ 12 inches above floor for optimum illumination
- Built-in connectors at fixture ends simplify wiring for end-to-end continuous rows
- Maximum 200 LED modules per 60W output circuit of power supply
- End caps also serve to cover conduit opening in wall and allow low voltage wire to feed into fixture
- Junction box also available, where conduit or wall box has not been roughed in
- Requires 12VDC transformer (See Power Supply specifications)
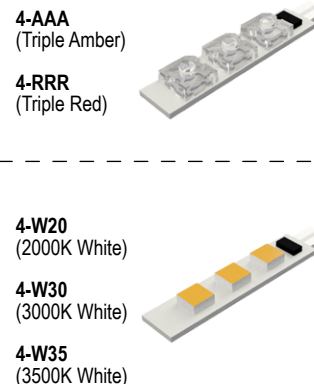- Use in conjunction with GEMINI 5000-S Striped Stair Nose to provide added definition of step edge

End View

1.00"

Wall

1.50"

Standard Non - Louvered shown

Optional Straight Louver

Optional Non-Scalloping Insert

Optional Non-Scalloping Left Louver
(For wall on left side of auditorium, facing seats)

Optional Non-Scalloping Right Louver
(For wall on right side of auditorium, facing seats)

Application Guide

GEMINI 4000 Wall Light

GEMINI 5000-S Striped Stair Nose

Mount 9"~12" above floor

Floorline

Use with GEMINI 5000-S Striped Stair Nose to provide added definition of step edge

For steps wider than 4ft, use triple White LEDs only

How to Specify GEMINI 4000 Series

GEM - 4000 - [____] - [____] - [____] - [____]

Light Control		LED Module		LED Spacing		Fixture Length	
SNL	Non-louvered	AAA	Amber	12	12" on center	5	5ft
SLV	Straight louver	RRR	Red			10	10ft
NSI	Non-scalloping insert	W20	2000K White				
		W30	3000K White				
NLL	Non-scalloping left louver	W35	3500K White				
NLR	Non-scalloping right louver						
		Consult factory for other color combinations. Minimum quantities may apply.		Consult factory for other spacings		10 ft sections may incur higher freight charges	

Example

GEM - 4000 - **LV** - **W35** - **12** - **10**

Replacement LEDs

4-AAA (Triple Amber)

4-RRR (Triple Red)

4-W20 (2000K White)

4-W30 (3000K White)

4-W35 (3500K White)

CELESTIAL LIGHTING

GEMINI 4000 Wall Light Accessories

End Cap

GEM 4000 Wall Light
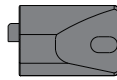
Wall

Conduit roughed in flush to wall

End cap

1.60"

2.25"
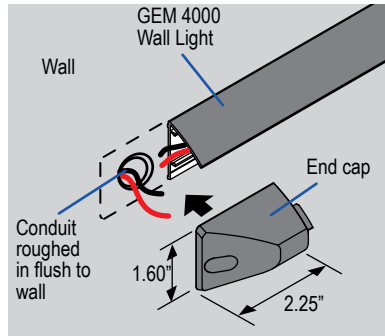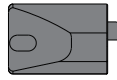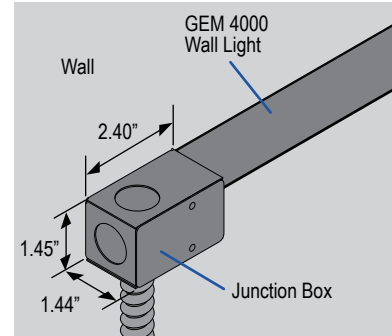
Left End Cap GEM-4LE

Right End Cap GEM-4RE

- Use end cap to finish beginning and end of run.
- End cap can also cover conduit opening in wall and conceal low voltage wire connection into wall light.

Junction Box

GEM 4000 Wall Light

Wall

2.40"

1.45"

1.44"

Junction Box

Junction Box GEM-4JB

- Use junction box at feed point if conduit has not been roughed into wall.
- Provides opening on one side to feed low voltage wires into wall light.
- Knockouts on 3 sides accept standard 3/8" or 1/2" trade size conduit.

WALL

WALL
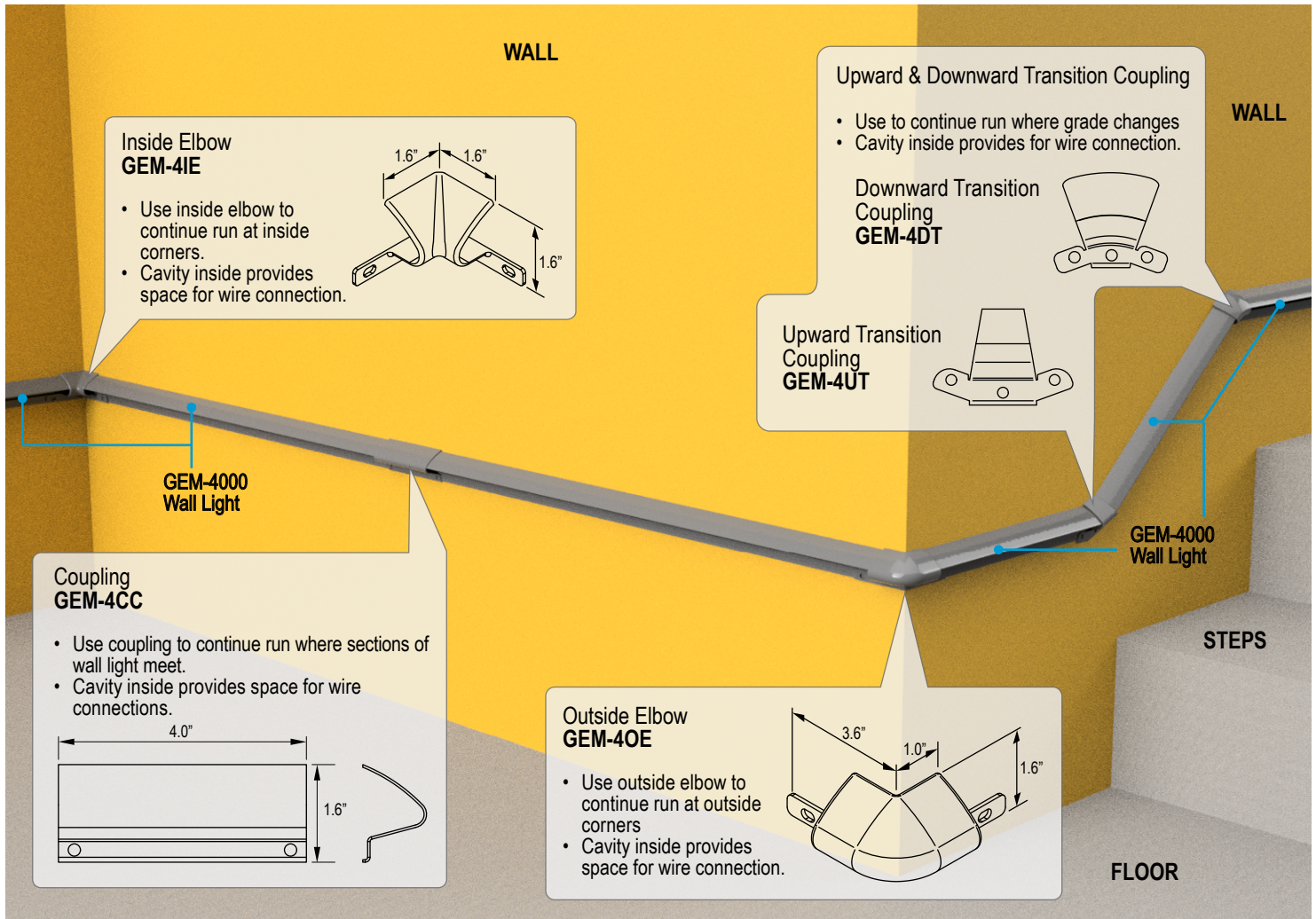
Inside Elbow
GEM-4IE

1.6"   1.6"

1.6"

- Use inside elbow to continue run at inside corners.
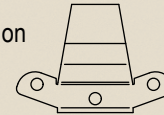- Cavity inside provides space for wire connection.
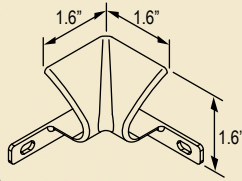
Upward & Downward Transition Coupling

- Use to continue run where grade changes
- Cavity inside provides for wire connection.

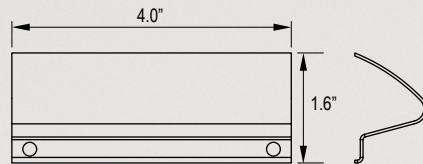### Downward Transition Coupling
GEM-4DT

Upward Transition Coupling
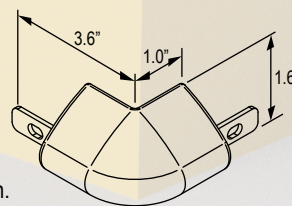**GEM-4UT**

GEM-4000 Wall Light

GEM-4000 Wall Light

Coupling
GEM-4CC

- Use coupling to continue run where sections of wall light meet.
- Cavity inside provides space for wire connections.

4.0"

1.6"

Outside Elbow
GEM-4OE

3.6"   1.0"   1.6"

- Use outside elbow to continue run at outside corners
- Cavity inside provides space for wire connection.

STEPS

FLOOR

Accessories

Wall Dog Screws
GEM-WDS

- Use to secure wall light to concrete wall
- Use one screw every 15 inches of wall light
- Use one screw per end cap

## Standard Low Voltage Electronic Power Supply

Ratings
- Input: 120VAC or 277VAC, 50/60 Hz
- Output: 12VDC
- Output current: 5 Amps per output circuit
- Maximum output power: 60W or 240W
- Overload protection: Auto reset circuit breaker
- Enclosure: Indoor / outdoor enclosure with conduit knockouts
- Operating temperature: -30° to 60° Celsius
- Certification: UL Class 2 Power Supply

Maximum Load
- Maximum 200 LED modules per 5A output circuit
- Do not connect more than 200 LED modules per 5A output

Dimming
- Compatible with most standard electronic low voltage dimmers
- Wire dimmer to primary side of power supply
- Requires minimum 50 LED modules per 5A output for effective dimming
- Recommended dimmer: Lutron Diva Series DVELV-300P (120VAC, 300W, single pole)

60W
1.375"
15.75"
2.00"
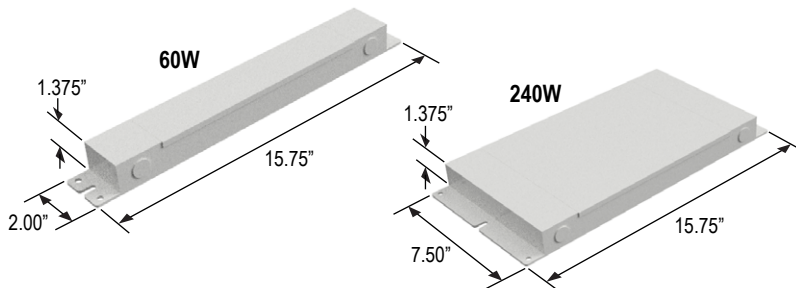
240W
1.375"
15.75"
7.50"

Ordering Codes

Item Number	Watts	Volts	Outputs	Dimensions	Weight
GPS-UNV-60-ELV	60 W	120VAC~277VAC to 12VDC	1 X 5A	15.75" L x 2.0" W x 1.375" H	2 lbs
GPS-UNV-240-ELV	240 W	120VAC~277VAC to 12VDC	4 X 5A	15.75" L x 7.5" W x 1.375" H	7 lbs

Must be mounted in an accessible location with sufficient ventilation and must not be submerged.

0-10V Dimmer Compatible Power Supply

Ratings
- Input: 120-277VAC, 50/60 Hz
- Output: 12VDC
- Maximum output current: 5 Amps
- Maximum output power: 60W
- Overload Protection: Short Circuit, Thermal Protection
- Operating temperature: -40° to 60° Celsius
- Maximum load: Do not connect more than 200 LED modules

1.50"
14.0"
15.625"
2.50"

Ordering Code

Item Number	Watts	Description	Dimensions	Weight
DD-010-12	60 W	120VAC~277VAC to 12VDC for 0-10V dimming*	15.6" L x 2.5" W x 1.5" H	3 lbs

* Recommended dimmer: Lutron Diva Series Part No. DVSTV
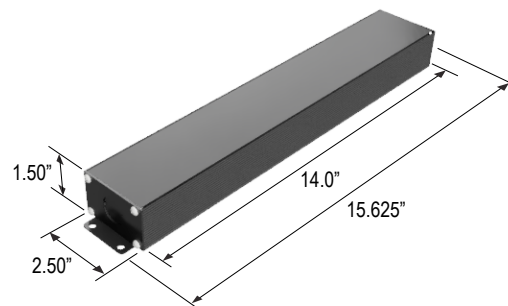
Must be mounted in an accessible location with sufficient ventilation and must not be submerged.

## Multi-Zone Dimming Power Supply

Features
- All-in-one, four-circuit dimming power supply
- No need to install power supply and dimmer separately
- Step and path lights in auditorium can be divided into 4 zones
- Light level of each zone can be controlled individually, to minimize glare in certain areas while allowing for full output in others
- Requires 50 LED modules per output circuit for effective dimming

Maximum Load
- Do not connect more than 200 LED modules per output circuit

Ratings
- Input: 120VAC or 277VAC, 50/60 Hz, 1.7A
- Output: 12VDC
- Maximum output power: 60W per output circuit
- Constant Voltage
- Overload protection: Auto Resettable
- Enclosure: NEMA/EEMAC Type 1 with conduit knockouts on all four sides of enclosure
- Operating temperature: -25° to 63° Celsius
- Certification: Class 2 Power Supply
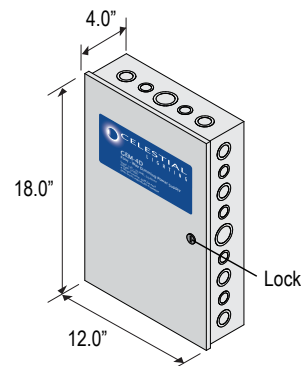
4.0"
18.0"
12.0"
Lock

Ordering Code

Item Number	Watts	Volts	Outputs	Dimensions	Weight
GEM-4D	240 W	120VAC ~ 277VAC, 50/60Hz, 1.7A	(60 x 4)	18" H x 12" W x 4" D	19 lbs

Must be mounted in an accessible location with sufficient ventilation and must not be submerged.

How to Feed GEMINI 4000

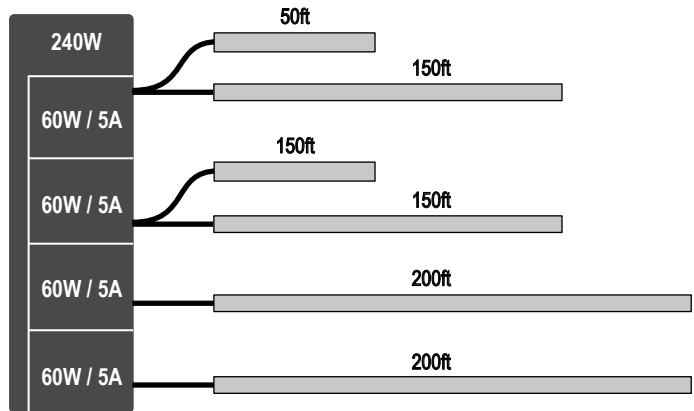GEMINI 4000 lightstrip uses 18 gauge red/black cable for 12VDC. (Polarity: Red - positive, Black - negative)

Standard LED modules
(AAA, RRR, W20, W30, W35)
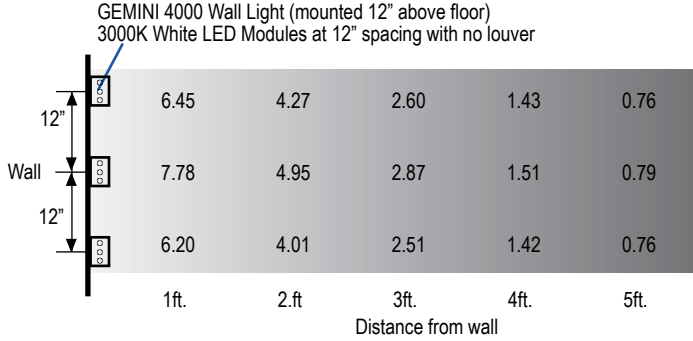Maximum 200ft per 60W output based on 12" LED spacing

60W Power Supply
Feeds up to 200ft

60W / 5A

66ft

66ft

66ft
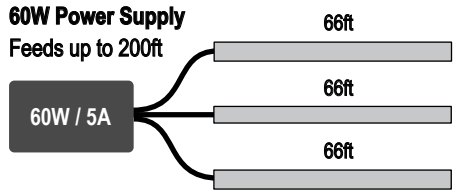
240W Power Supply
Feeds up to 800ft total (200ft per 60W output)

240W

60W / 5A

50ft

150ft

60W / 5A

150ft

150ft

60W / 5A
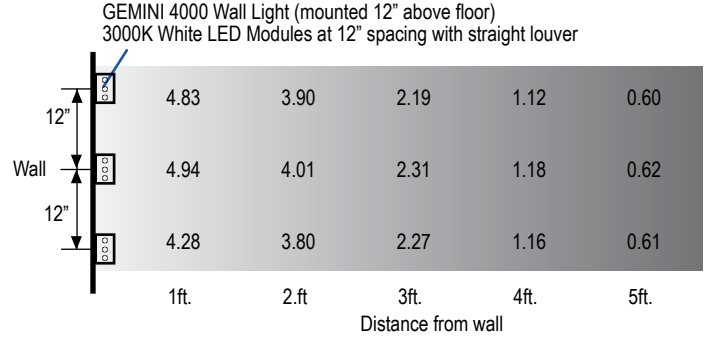
200ft

60W / 5A

200ft

Multiple runs may be connected together, so long as total footage of runs
does not exceed 200ft per 60W output (based on 12" LED spacing)

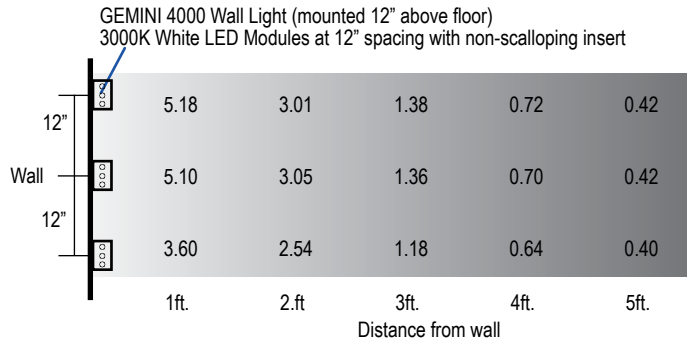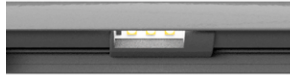## Footcandle Measurements (using 3000K White LEDs)
Top view of floor

Standard Non-Louvered

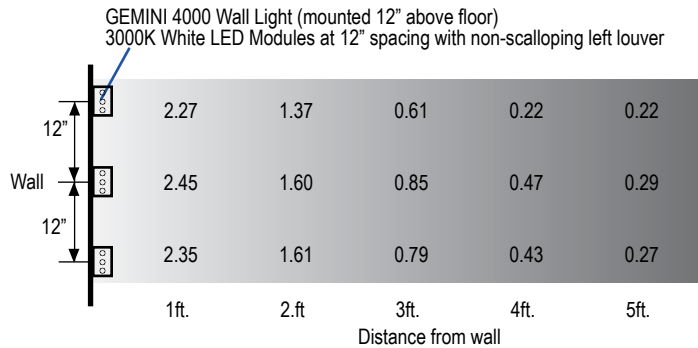GEMINI 4000 Wall Light (mounted 12" above floor)
3000K White LED Modules at 12" spacing with no louver

	1ft.	2.ft	3ft.	4ft.	5ft.
12"	6.45	4.27	2.60	1.43	0.76
Wall	7.78	4.95	2.87	1.51	0.79
12"	6.20	4.01	2.51	1.42	0.76

Distance from wall

Optional Straight Louver

GEMINI 4000 Wall Light (mounted 12" above floor)
3000K White LED Modules at 12" spacing with straight louver

	1ft.	2.ft	3ft.	4ft.	5ft.
12"	4.83	3.90	2.19	1.12	0.60
Wall	4.94	4.01	2.31	1.18	0.62
12"	4.28	3.80	2.27	1.16	0.61

Distance from wall

Optional Non-Scalloping Insert

GEMINI 4000 Wall Light (mounted 12" above floor)
3000K White LED Modules at 12" spacing with non-scalloping insert

	1ft.	2.ft	3ft.	4ft.	5ft.
12"	5.18	3.01	1.38	0.72	0.42
Wall	5.10	3.05	1.36	0.70	0.42
12"	3.60	2.54	1.18	0.64	0.40

Distance from wall
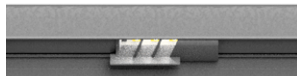
Optional Non-Scalloping Left Louver
(Mounted on left-side wall, facing seats with back to screen)

GEMINI 4000 Wall Light (mounted 12" above floor)
3000K White LED Modules at 12" spacing with non-scalloping left louver

	1ft.	2.ft	3ft.	4ft.	5ft.
12"	2.27	1.37	0.61	0.22	0.22
Wall	2.45	1.60	0.85	0.47	0.29
12"	2.35	1.61	0.79	0.43	0.27

Distance from wall

### Optional Non-Scalloping Right Louver
(Mounted on right-side wall, facing seats with back to screen)

GEMINI 4000 Wall Light (mounted 12" above floor)
3000K White LED Modules at 12" spacing with non-scalloping right louver

	5ft.	4ft	3ft.	2.ft	1ft.	
12"	0.22	0.22	0.61	1.37	2.27	
Wall	0.29	0.47	0.85	1.60	2.45	
12"	0.27	0.43	0.79	1.61	2.35	

Distance from wall
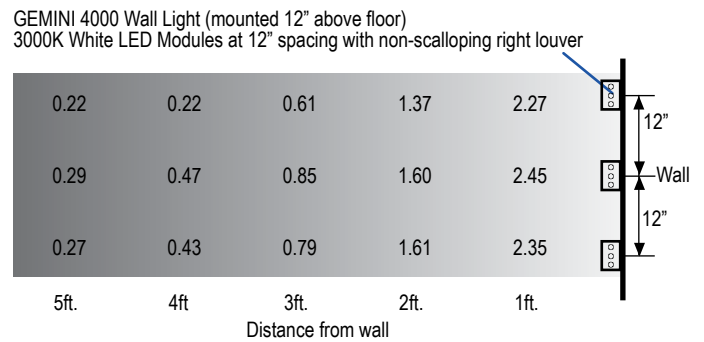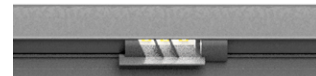
GEMINI 5000-S Striped Stair Nose

Light grey stripe on black stair nose provides added step definition when using GEMINI 4000 Wall Light to illuminate steps.

Dimensions

0.50" 3.00"
2.50" 2.50"
2.50"
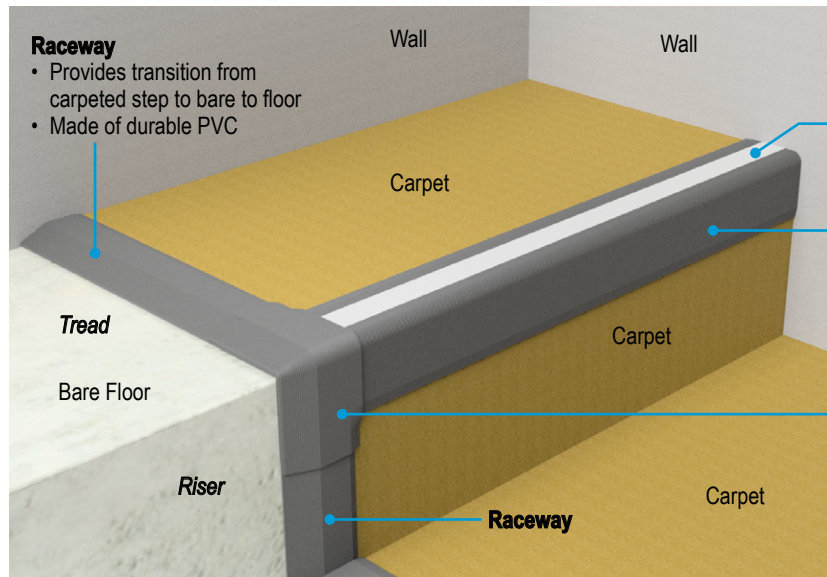
Raceway
• Provides transition from carpeted step to bare to floor
• Made of durable PVC

Wall   Wall

Carpet

1" light grey stripe

Tread

Bare Floor

GEMINI 5000-S
• Soft vinyl stair nose with light grey stripe on tread
• Also available with stripe on both tread and riser
• Withstands extreme loads and heavy foot traffic
• Conforms to gradual curves and irregularities in flooring
• ADA compliant design (No trip hazard)

Carpet

End cap
• Finishes corner where stair nose meets raceway, providing seamless appearance with matching ribs and contours
• Includes pins that mate with stairnose, preventing displacement
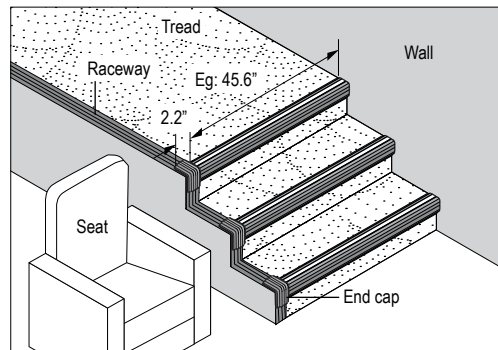• Made of durable PVC

Riser   Carpet
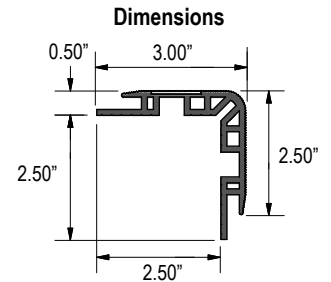
Raceway

Applications
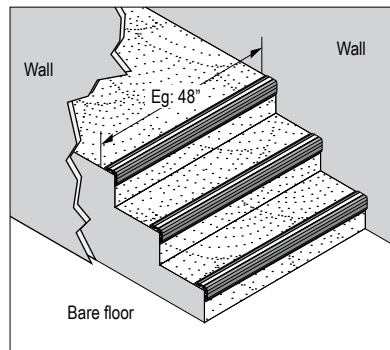
For steps that are between two walls

GEM-5000-S: Measure the width of each step.
**End cap:** None
Raceway: None

For steps with wall on one side and seat on the other side

GEM-5000-S: Measure the width of each step
End cap: Order one end cap per step to be installed on the opposite side of the wall. Cut Stair nose 2.2" shorter to allow for the width of one end cap. (Ships loose)
Raceway: Measure the tread and riser for each step and calculate total footage of raceway needed. Ships in 5ft or 10ft lengths, cut to length on site.
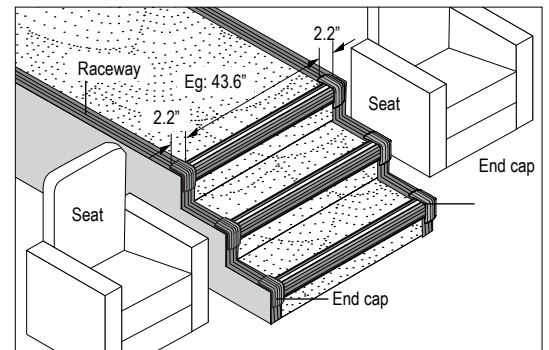
For steps between seats, use end caps on both sides

GEM-5000-S: Measure the width of each step
End cap: Order two end caps per step. Cut Stair nose 4.4" shorter to allow for the width of the two end caps. (Ships loose)
Raceway: Measure the tread and riser for each step and calculate total footage of raceway needed. Ships in 5ft or 10ft lengths, cut to length on site.
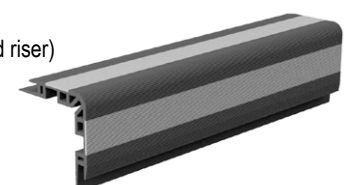
How to Specify GEMINI 5000-S Series

GEM - 5000 - ☐ - ☐

Single or Dual Stripe		Specify width of step	
S	Stripe on tread	3.0	3.0 feet
DS	Stripe on tread and riser	4.0	4.0 feet
		5.0	5.0 feet
		6.0	6.0 feet
		Consult factory for custom lengths	

Example

GEM - 5000 - | S | - | 4.0 |

GEMINI 5000-S Striped Stair Nose

GEM-5000-S
(Stripe on tread)

GEM-5000-DS
(Stripe on tread and riser)
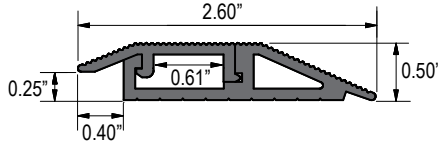
CELESTIAL
L I G H T I N G

GEMINI 5000 Striped Stair Nose
Accessories

Raceway
Use on the tread and riser to mate with GEM-5SE end caps

GEM-5SR
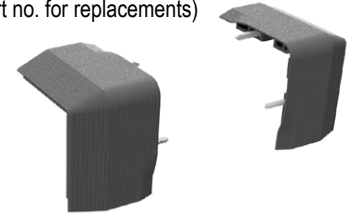(Black base, black cover)

2.60"
0.25" 0.61" 0.50"
0.40"

GEM-5SC
(Black base, grey cover)

2.60"
0.25" 0.61" 0.50"
0.40"
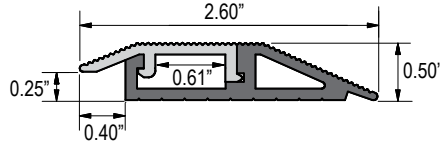
End caps
GEM-5SE
(Part no. for replacements)

Universal design:
Fits on either left or right side of stairnose

Accessories

Adhesive
GEM-MP75-10

• 10 oz per tube
• Use to secure stairnose and raceway to floor surface

Glue Gun
GEM-GG

• Use to apply adhesive out of tube

Flat Head Tapcon Screw
GEM-FTS

• Use to secure bullnose to concrete step

Hex Head Concrete Screw
GEM-HTS

• Use to secure raceway to concrete floor

Adhesive and screw usage chart

Accessories	GEM-5000	Raceway
Adhesive	1 tube / 5 ft.	1 tube / 30 ft.
Flat head screw	1 screw / ft.	not used
Hex head screw	not used	1 screw / ft.