

Product Overview (for complete specifications, see pages 2 & 3)

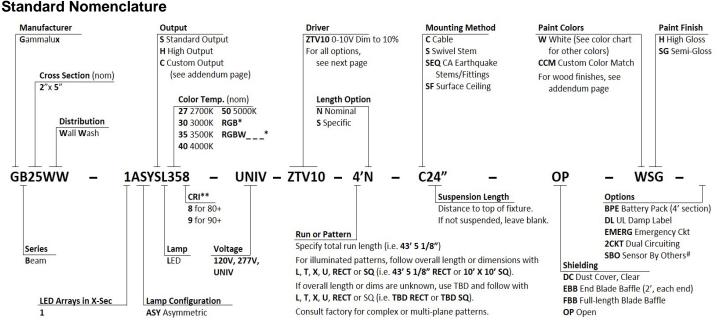
Upgrade Capability: LED components may be easily upgraded in the field to increase energy efficiency.

**Construction:** ARRA, RoHS, REACH and Prop 65 compliant. Extruded aluminum housing for superior fit and finish. Runs and complex patterns can be built to match field conditions, including full illuminated patterns.

Unbroken Illumination: Continuous illumination in custom-length runs and patterns with illuminated corners.

**Electrical:** LED components by major manufacturers. Fixtures can be fitted with integral sensors, control interface devices and specialty LED components (consult factory). Standard Output, High Output and Custom Output options available.

Optical: LEDs are not visible at any angle. Optional white semi-gloss internal baffle reduces inline glare and striations on adjacent wall.



\*\* 90+ CRI option increases wattage by nom. 14.5%. # Sensor By Others, factory installed (consult factory).





GAMMALUX®

Lighting Systems

Your design intent '

### Specifications (continued on next page)

### Electrical

**Output:** Standard (S) and high (H) options deliver a pre-set lumen package (see chart below). Custom-programmed output (C) is specified as LPF, WPF or % of High Output (see Custom Programmed Output page).

Static Driver: eldoLED Optotronic\* programmable driver, wired for static operation (DVR).

**0-10V Dimming:** eldoLED Optotronic\* programmable driver, wired for 0-10v control and dimming to 10% (**ZTV10**) or to 1% (**ZTV1**). For 0-10v dimming to 1% in lengths other than 1' increments, consult factory.

Step Dimming: Generic step dimming driver, two hot inputs for 100% and 50% output (SD2).

DALI Dimming: Generic DALI driver with two loose control wires exiting fixture at power feed location (DALI).

Lutron Dimming: Hi-lume LTE dim to 1% 2-wire 120V forward phase (LTEA2WA for PWM providing smoothest dimming or LTEA2WC for CCR in applications with EMI requirements). Hi-Lume dim to 1% EcoSystem with Soft-On, Fade-to-Black (LDE1).

White Emitter: Nichia 757G emitters\* binned within 3 MacAdam ellipses in Osram or Gammalux proprietary array. 90+ CRI option with extended lead time (CRI code 9) results in nominal 14.5% drop in efficacy; increase calculated wattage by 14.5%.

**Battery Pack:** Bodine BSL310LP\* (BPE). 4W max input, 10W initial output, delivers min. 27% of High Output value per 4' length. LED System: 70% lumen output (L70) at max 85 degrees C calculated at >60k hours. Fixtures are shipped with anti-static gloves to minimize the risk of damage to LEDs during installation. 5 year limited warranty.

**Upgrade Capability:** LED assemblies can be replaced in the future with the latest factory-provided and fully warranted components. On-board sensors, control interface devices and alternate LED components may be specified (consult factory). Fixtures bear UL & cUL Dry Location label. Damp Location label available (**DL**).

\*Subject to availability; may be substituted by Gammalux. Components and specifications may be changed without notice.

	STAN	DARD OUT	PUT LED		HIGH OUTPUT LED						
OPEN APERTURE (OP)			DELIVERS: 364.6 LPF			OPEN APERTURE (OP)			DELIVERS: 485.8 LPF		
ССТ	2700 K	3000 K	3500 K*	4000 K	5000 K	ССТ	2700 K	3000 K	3500 K*	4000 K	5000 K
WATTS / FT.	5.9	5.7	5.6	5.3	5.2	WATTS / FT.	8.1	7.8	7.6	7.3	7.1

### Construction

**Housing:** ARRA, RoHS, REACH and Prop 65 compliant. Extruded aluminum body 2.00" wide x 5.00" high, 6063T5, 0.070" min thickness. Each housing is 12' max unless longer housings are pre-coordinated with the factory to reduce joints and installation labor. Fixtures are built per approved factory drawings and tested as a complete system at the factory. Continuous runs and patterns are ordered, built and shipped with a single item #. Fixtures ordered as individuals are not designed to be joined together in the field.

Joiner System: Automatic alignment, no loose parts, one tool to tighten factory installed bolts for hairline seam.

**Lamping:** Patterns are fully illuminated. Runs ordered in Specific Length (Length Option **S**) will be built to the exact dimension shown on signature-approved shop drawings. Runs ordered in Nominal Length (Option **N**) may be factory-adjusted to accomodate standard mounting positions or grid centers. Factory drawings will show all dimensions for approval prior to production. Fixtures built to less than 4' may require master/satellite driver installation - consult factory.

**Mounting:** Aircraft cable is 7x7 stranded stainless steel with stopper fitting at the top end. Lower end strands are welded and ground for easy insertion into adjustable cable gripper (**C**). Feed cord is straight, white 3/C SVT or SJT #18 AWG. Stems are 3/8" schedule 40 pipe with top swivels (**S**). California UBC compliant stems with internal safety cables available (**SEQ**). Housing can be mounted direct to wall (**WM**). Direct to surface mounting available (**SF**). Gammalux recommends mounting no less than 18" from the object wall.





### **Specifications (continued)**

### Optical

**Reflector:** Shall be asymmetric extruded aluminum painted high reflectance white.

Dust Cover: Clear acrylic dust cover, snap-in fitting (DC). Multiply delivered lumens by .97.

Internal Baffle: Optional, field removable baffle shall be formed steel, painted white semi-gloss (EBBWSG FBBWSG). Multiply delivered lumens by .90.

#### Finish

Acid etched or clear annodized housing electrostatically sprayed with high solids aliphatic two component polyurethane high (H) or semi-gloss (SG) to an avg. thickness of 2 mils. Custom finish, consult factory. Wood Finishes, back page.



### **Packing and Shipping**

Fixtures built for continuous rows and patterns are given a specific location identifier, clearly identified on factory layout drawings, the fixture's ID Label, protective wrapping and on each end of fixture carton. Shipping pallets are built with 2" clearance, extending beyond the length and width of cartons, providing shipping protection.

Approx. weight of 4' module is 16 lbs. including carton. Weight of pallet and supplemental packing materials not factored in.

### Internal Blade Baffle

Fixtures built with no internal baffle (**OP** or **DC**) may create glare for viewers in a corridor and striations on adjacent walls in a wall-towall installation.

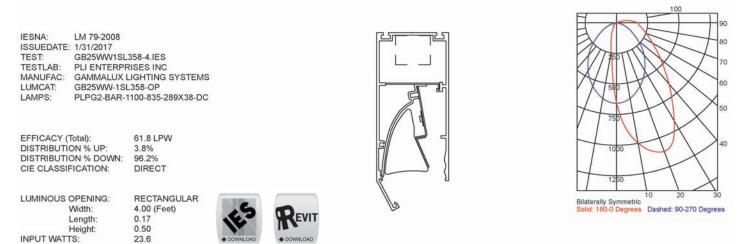
Internal 2' end baffle (EBB) provides lateral cutoff at fix





#### Photometric Reports for STANDARD OUTPUT FIXTURES

### FIXTURE USES OPEN APERTURE AND 3500 K BOARDS. @ 80+ CRI

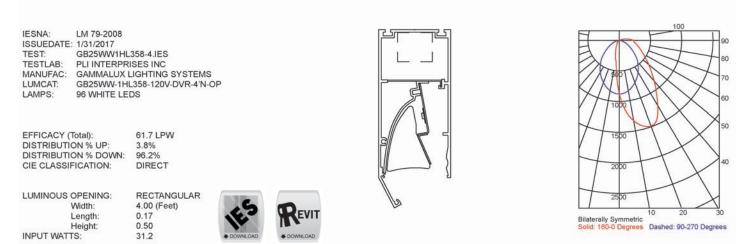






#### Photometric Reports for HIGH OUTPUT FIXTURES

### FIXTURE USES OPEN APERTURE AND 3500 K BOARDS. @ 80+ CRI

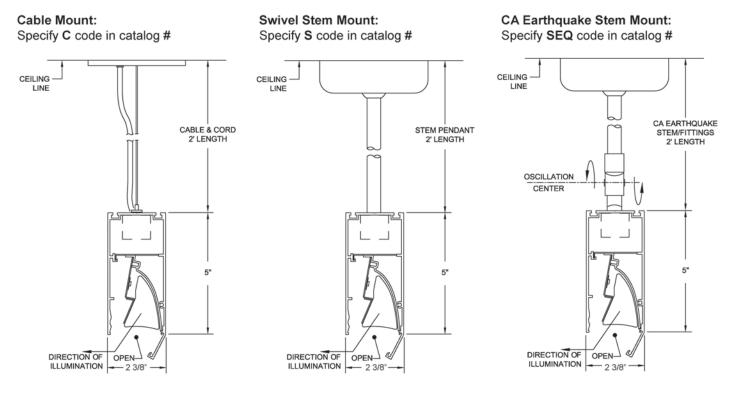




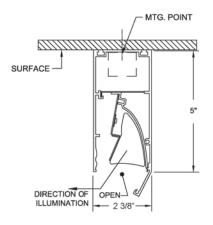


## **Mounting Details**

Factory Drawings: Fully dimensioned factory drawings will be provided upon receipt of purchase order.



Surface Mount: Specify SF code in catalog #



Gammalux Lighting Systems reserves the right to change the details of fixture design and construction at any time.





### **Custom Programmed Output**

**Custom Programmed Output** can be specified to produce approximate Delivered Lumens per Foot, Percentage of High Output Value or Maximum Watts per Foot.

### **Delivered Lumens Per Foot**

Gammalux deals only in delivered lumens per foot. When working to match or exceed a competitor product's Lumens Per Foot package, be sure you are looking at their Delivered (through the lens) lumens per foot, not their System (bare board) lumens per foot.

In the Gammalux item #, use **C** as the Output designator and add a fixture description stating the required Lumens Per Foot value (ie: if you need 600 lumens per foot delivered by the fixture, the line note would read "Program = 600 LPF").

### Percentage of High Output Value

If the required delivered lumens per foot are not known, run lighting calculations using our High Output IES file and identify the percentage of increase or decrease required to produce the correct lighting in the space.

In the Gammalux item #, use **C** as the Output designator and add a fixture description stating the required percentage of decrease from our High Output value (ie: for 60% of our High Output value, the line note would read "Program = 60% of High Output").

### **Maximum Watts Per Foot**

In the Gammalux item #, use **C** as the Output designator and add a fixture description stating the required Maximum Watts per Foot (ie: if you need the fixtures capped at a maximum of 7 watts per foot, the line note would read "Program = 7 WPF").

For all three methods, custom programming capability is currently 25-200% of our High Output value. For requirements outside of this range, consult factory.





G-Beam Series GB25WW-LED-OP Wall Wash - Suspended, Surface or Wall Mount Asymmetric Direct Distribution

The images on this page depict several typical installations and the resulting light levels as calculated in a computer model scenario.

Examples are of a 16' installation centered on a 24' wall. Reflectivity assumptions are: ceiling 80%, walls 50%, floor 20%. The values represented are the footcandle levels obtained in the horizontal center of the wall. The fixture is using High Output LED boards with 3500K diodes.

Although the LED boards are hidden from view, the inside of the fixture is bright. This will be visible to room occupants positioned between the fixture and the wall.

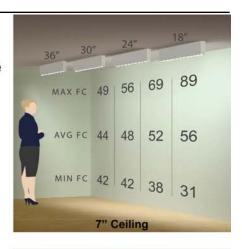
# **Application Guide**

Example:

• In a 7' ceiling with the fixture mounted 36" from the wall, the user obtains an average of 44fc with a max of 49 and a min of 42

## Example:

• In a 9' ceiling with the fixture mounted 30" from the wall, the user obtains an average of 40fc with a max of 55 and a min of 26.





## Examples:

• In a 11' ceiling with the fixture mounted 24" from the wall, the user obtains an average of 35fc with a max of 67 and a min of 14.



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The images on this page depict several typical installations and the resulting light levels as calculated in a computer model scenario.

Examples are of a 16' installation centered on a 24' wall. Reflectivity assumptions are: ceiling 80%, walls 50%, floor 20%. The values represented are the footcandle levels obtained in the horizontal center of the wall. The fixture is using High Output LED boards with 3500K diodes.

Although the LED boards are hidden from view, the inside of the fixture is bright. This will be visible to room occupants positioned between the fixture and the wall.

# Application Guide

Example:

In a 9' ceiling with the fixture mounted 30" from the wall, the user obtains an average of 44fc with a max of 60 and a min of 32.
Fixtures are suspended 6" from the ceiling.



18" 24" 30" 89 36" 71 58 MAX FC 49 38 35 AVG FC 32 32 MIN FC 25 24 21 17 11" Ceiling

Examples:

In a 11' ceiling with the fixture mounted 24" from the wall, the user obtains an average of 35fc with a max of 71 and a min of 21.
Fixtures are suspended 12" from the ceiling.



## Wood Finishes

Fixture housings are powder coated with a base finish, baked, then wrapped in a film with the decorative grain pattern. Baking the housing again allows the grain to become embedded into the powder coated finish. This is not a decal or veneer. Additional lead time and cost increases apply. Consult factory for pricing. Swatches are 3" x 4".



# DUE TO VARIANCES IN MONITORS AND PRINTERS, ACTUAL FINISHES MAY APPEAR DIFFERENT FROM SWATCHES.



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