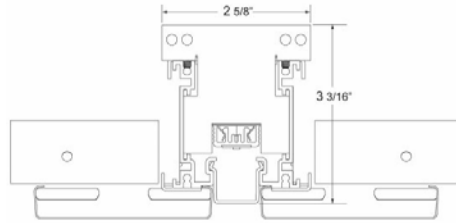




Click or scan QR code to view latest spec sheet



Revision Date: November 08, 2023
Gammalux Lighting Systems reserves the right to change details of fixture designs and construction at any time.



LED Lamping



Click photo to view product page
Page 1: Overview & Nomenclature
Pages 2-3: Specifications
Pages 4-5: Photometric Info / Downloads
Page 6: Mounting Details
Pages 8-9: Custom Programming

Product Overview (for complete specifications, see pages 2 & 3) *****NEW***** See last page for **APPROVED CUT RELEASE**.

Quick Ship: Most product options are shippable within 2-3 weeks! **Check our Quick Ship Guide for details.**

Integration: GAMMALUX GLL22RC2 is approved for use in the following CertainTeed Architectural ceilings: all Box Series and Multi-Box. GAMMALUX factory shop submittal drawings will be provided for each lighting fixture order.

Construction: I.C. rated. ARRA, RoHS, REACH and Prop 65 compliant. Runs can be built to field dims.

Unbroken Illumination: Continuous illumination via flush lenses available in medium or heavy diffusion, evenly illuminated.

Electrical: LED components by major manufacturers, may be upgraded in the field to increase energy efficiency. Fixtures can be fitted with specialty LED and control components (consult factory). Standard Output, High Output and Custom Output options available.

Standard Nomenclature

Quick Ship Eligible
Most options 2-3 weeks*

Output
S Standard Output
H High Output
C Custom Output (see addendum page)

Color Temp. (nom)
27 2700K 30 3000K
35 3500K 40 4000K
50 5000K
RGB & RGBW, consult factory

Length Option
S Specific
N Nominal

Driver
ZTV10 0-10V Dim to 10%
ZTV1 0-10V Dim to 1%
For all options, see next page

Ceiling Interface
LL CertainTeed Linear Levels, Box or Multi-Box Series systems

Paint Colors
COT Gammalux match of CertainTeed Cotton White #0280
NAT Gammalux match of CertainTeed Natural #7163

Reflectance
10 10%
20 20%
If NAT, leave blank

Manufacturer
Gammalux

Cross Section (nom)
2"x 2"

Model
2nd Gen

Housing
RC Recessed

Series
LL Light Levels

SL358

CRI**
8 for 80+
9 for 90+

Lamp
LED

Voltage
120V, 277V, UNIV

UNIV

ZTV10

4'N

Run Length
Specify total run length (i.e. 43' 5 1/8")

REC/LL

Mounting
REC Recessed in ceiling.
Consult factory for in-wall.

ASLMD

Options
BPE Battery Pack (4' section)
DL UL Damp Label
EMERG Emergency Ckt
2CKT Dual Circuiting
SBO Sensor By Others#

Shielding
ASLMD Acrylic
Satin Lens, Medium Diffuse
ASLHD Acrylic
Satin Lens, Heavy Diffuse

GLL22RC2

SL358

UNIV

ZTV10

4'N

REC/LL

ASLMD

COT10

** 90+ CRI increases watts nom. 14.5%. # Sensor by Others (consult factory).
*Some restrictions apply. **Check our Quick Ship Guide for details.**



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).

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](#) 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 watts 14.5%.

Battery Pack: Bodine [BSL10T3](#)* (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](#).

Sensors: Sensors are as specified, confirmed by Gammalux prior to factory quote. Examples are Enlighted [Micro Sensor](#), Lutron [Athena Wireles Node](#), Lutron [Vive](#), Wattstopper [FS-205](#).

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.

LUMENS AND WATTS BY OUTPUT OPTION AND LED COLOR @ 80+ CRI*											
STANDARD OUTPUT LED						HIGH OUTPUT LED					
MEDIUM DIFFUSE LENS (ASLMD) DELIVERS: 366.3 LPF						MEDIUM DIFFUSE LENS (ASLMD) DELIVERS: 487.0 LPF					
CCT	2700 K	3000 K	3500 K*	4000 K	5000 K	CCT	2700 K	3000 K	3500 K*	4000 K	5000 K
WATTS / FT.	6.3	5.9	5.8	5.7	5.4	WATTS / FT.	8.6	8.2	8	7.8	7.4
*IES FILES WERE CREATED USING 3500K DIODES @80+ CRI. WATTAGE IS MULTIPLIED BY 1.08 FOR 2700K, 1.02 FOR 3000K, .98 FOR 4000K AND .93 FOR 5000K DIODES TO MAINTAIN THE SAME DELIVERED LUMENS THROUGHOUT ALL COLOR TEMPERATURES. FOR 90+ CRI, INCREASE WATTAGE BY 14.5%. SEE ADDENDUM FOR CUSTOM PROGRAMMING.											

Construction

Housing: I.C. rated. ARRA, RoHS, REACH and Prop 65 compliant. Extruded aluminum body 2.4" wide x 2.31" 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.

Joiner System: Automatic alignment via two bolts for hairline seam, no loose parts. No light leaks.

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 of mounting and power feed locations. Fixtures built to less than 4' may require remote driver installation - consult factory.

Mounting: Recessed into a Linear Levels, Box Series and Multi-Box Series ceiling systems by CertainTeed Architectural. Mounting brackets slide along the housing side to interface with the CertainTeed Architectural Universal Carrier butted against the housing or passing within 6" of the fixture end.

Specifications (continued)

Optical

Acrylic Satin Lens, Medium Diffuse: Snap-in. Shall be 100% DR acrylic (**ASLMD**).

See lens images on photometric pages.

Finish

Housing electrostatically sprayed with high solids aliphatic two component polyurethane to an avg. thickness of 2 mils. over acid etching primer or commercial clear anodizing. High quality paint finish, matched to CertainTeed panels.



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 12 lbs. including carton. Weight of pallet and supplemental packing materials not factored in.

**Photometric Reports for
STANDARD OUTPUT FIXTURES**

FIXTURE USES LENS ASLMD (MEDIUM DIFFUSE) AND 3500 K BOARDS. @ 80+CRI

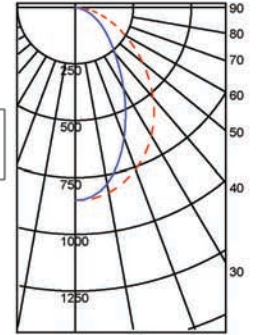
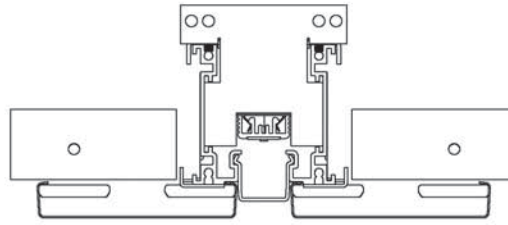
IESNA: LM 79-2008
ISSUEDATE: 3/6/2015
TEST: 33801 mod to MD+SO
TESTLAB: UL Verification Services Inc.
MANUFAC: GAMMALUX LIGHTING SYSTEMS
LUMCAT: GLL22RC2-1SOLED35-ASLMD
LAMPS: PLPG2-BAR-1100-835-289X38-DC

EFFICACY (Total): 57.5 LPW
DISTRIBUTION % UP: 0%
DISTRIBUTION % DOWN: 100%
CIE CLASSIFICATION: DIRECT

LUMINOUS OPENING: RECTANGULAR
Width: 0.08 (Feet)
Length: 4.00
Height: 0.21
INPUT WATTS: 25.4



Acrylic Satin Lens,
Medium Diffuse
(ASLMD)



Quadrilaterally Symmetric
Dashed: 0 Degrees Solid: 90 Degrees



**Photometric Reports for
HIGH OUTPUT FIXTURES**

FIXTURE USES LENS ASLMD (MEDIUM DIFFUSE) AND 3500 K BOARDS. @ 80+CRI

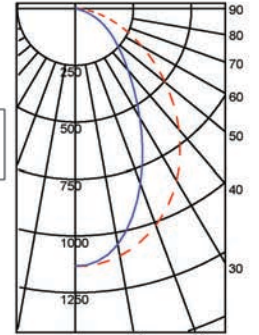
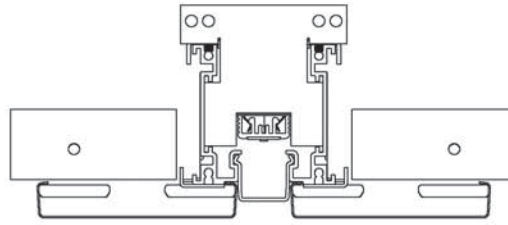
IESNA: LM 79-2008
ISSUEDATE: 3/6/2015
TEST: 33801 mod to MD
TESTLAB: UL Verification Services Inc.
MANUFAC: GAMMALUX LIGHTING SYSTEMS
LUMCAT: GLL22RC2-1HOLED35-ASLMD
LAMPS: PLPG2-BAR-1100-835-289X38-DC

EFFICACY (Total): 55.2 LPW
DISTRIBUTION % UP: 0%
DISTRIBUTION % DOWN: 100%
CIE CLASSIFICATION: DIRECT

LUMINOUS OPENING: RECTANGULAR
Width: 0.08 (Feet)
Length: 4.00
Height: 0.21
INPUT WATTS: 35.3



Acrylic Satin Lens,
Medium Diffuse
(ASLMD)



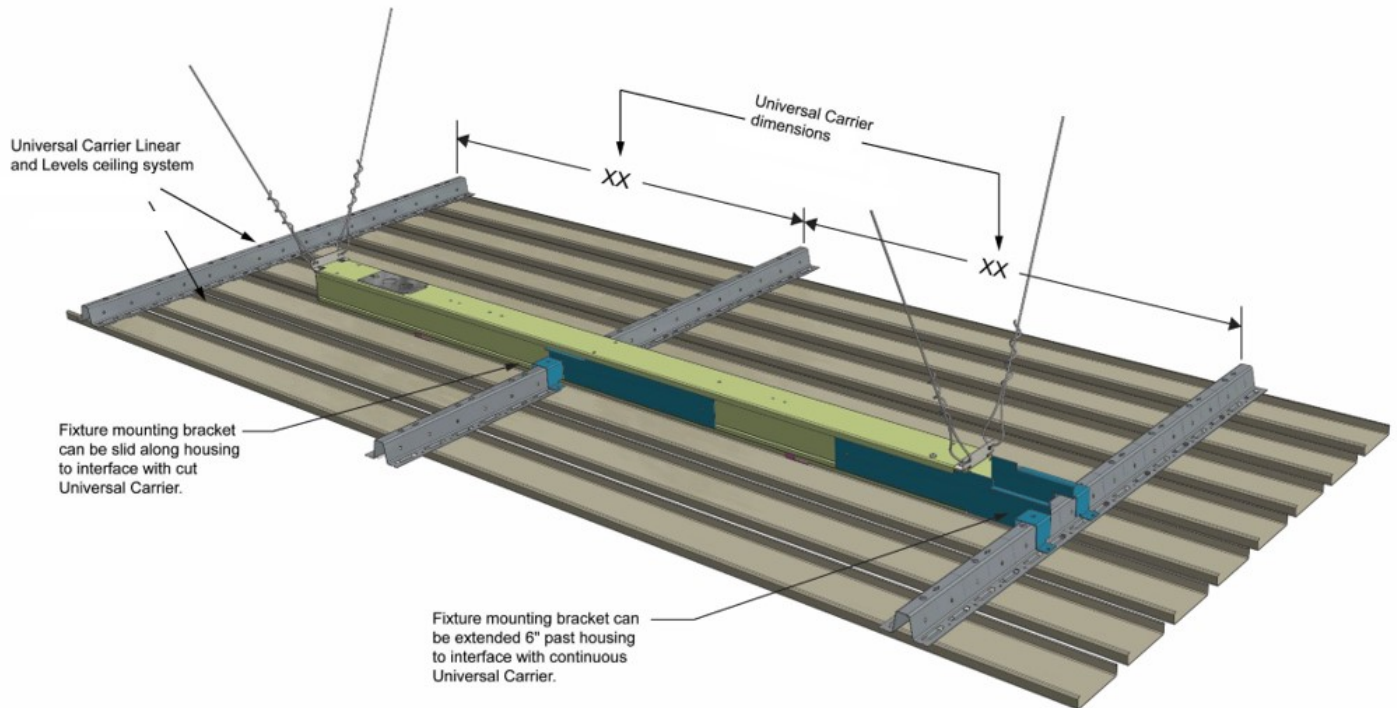
Quadrilaterally Symmetric
Dashed: 0 Degrees Solid: 90 Degrees



Mounting Details

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

Integration Details



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.

Approved Cut Release option

If offered for Approved Cut Release in the Gammalux factory quote, the product in the accompanying purchase order is authorized by the GC to be released to production without the need for factory drawings for approval.

I confirm that:

- all ordering options are clearly noted (highlighted, boxed, written in, etc.) on page 1 of this fixture cut sheet
- quoted leadtime begins upon Gammalux's confirmation that the P.O. and marked cut sheet match their quote.
- the order will be released to production and a "record only" drawing will be provided prior to product shipment
- changes after Gammalux's release to production will result in a minimum 25% change fee which increases as production progresses.

General Contractor _____

GC's authorized Signature (or stamp below) _____

Signatory's printed name _____