



LR105 SERIES

Architectural Recessed 2X4 LED Volume Luminaire Ultra-Shallow Design

Fixture Type:

Job Information:

SPECIFICATIONS:

LED MODULES:

- High performance linear configured LED module boards.
- Each board consists of multiple mid-power, high efficacy LEDs in a precise layout eliminating the need for supplemental heat sinking.
- The boards produce an even and diffuse light which maximizes optical efficiency.
- Compatible with the dimming performance of the LED driver.
- Color temperatures available: 3000K, 3500K and 4000K.
- Upon request: 5000K.

LED DRIVERS:

- Factory programmable constant current LED power supply.
- Multiple standard drive current outputs (factory set by Mercury) are cataloged with their corresponding lumen package offerings. Upon request, custom drive current outputs and lumen packages are available.
- Note: Certain cataloged lumen packages may be provided with a non-programmable constant current LED power supply at Mercury's discretion. Contact factory if critical.
- Universal voltage input, 120V-277V, 50HZ-60HZ.
- Specification grade dimming down to 1% on 0-10V dimming controls.

LED LUMEN PACKAGES:

- Cataloged standard lumen packages. See attached chart for full details.
- Custom lumen packages pre-set are optional with programmable drivers only. Contact factory for details.

HOUSING:

- All metal parts are fabricated in a computer-controlled operation from heavy gauge code grade cold rolled steel.
- Rivets hold all parts together for strength and unity.
- A custom formulated non-glare white powder coating is applied to the housing after fabrication providing a reflectivity of at least 90%.

DIFFUSER:

- Architecturally-squared profile design.
- Extruded from custom formulated high transmission acrylic material.
- Linear ribbing for high LED performance.

STANDBY LIGHTING OPTION:

- Self contained module, 10W only (BA-C40EM10). Battery backup upon loss of power.
- May not be available with some higher lumen packages. See Lumen Package matrix.

INSTALLATIONS:

- Designed for installation into NEMA Type G lay-in acoustical grid ceiling systems, 1" grid or 9/16" fine-line grid.
- For NEMA Type F dry wall applications an additional flame kit must be used with Type G housing.
- Four pry-out style grid support clips are located on the housing sides.
- Four auxiliary suspension points are also provided for securing to building structure.
- A quick wiring access plate is located on back of the housing. Additional knockouts provided.
- Factory installed power whips as specified.

CERTIFICATE OF SAFETY COMPLIANCE AND LISTINGS:

- Luminaire: UL and CUL listed 1598 and bears their label. Suitable for damp locations.
- Optional: Suitable for wet locations marking is available. Contact factory for all details.
- IC rated. (Some higher lumen packages may not qualify. See Lumen Package matrix).

WARRANTY:

- 5-year limited warranty is standard. Special 10-year warranty available on a job-to-job basis. Complete LED warranty terms available at www.mercltg.com.
- Actual performance may differ as a result of end-user environment and application.
- Most LED luminaires are suitable to operate in ambient temperatures from -20C (-4F) to 25C (77F).
- The following exclusions apply: Luminaires with optional standby lighting option, integral lighting controls options, or wireless control options. Consult factory.
- LM-79 testing was measured under a controlled 25C (77F) ambient operating temperature.

FEATURES:

- Ultra-shallow recessed 2X4 ambient LED luminaire featuring a single linear high transmission acrylic diffuser.
- Architecturally-squared diffuser envelopes the LED light source allowing maximum light transmission while eliminating pixelations and hot spots.
- Delivers a balanced amount of horizontal and vertical illumination.
- Digital LED technology provides high efficacy and energy efficiency.
- Multiple power and light levels are offered as standard to allow meeting design and energy needs per application. Custom factory set levels available on request.
- Lumen maintenance; Reported L70 (hours) & L80 (hours) > 60,000.
- CRI greater than 80.
- Fixture lumens per watt ratios up to 141.
- American Made.
- Matching surface luminaire: LW5 Series.



LR105 SERIES

Example: LR105-24G-5700-35K-1%-UNI-BAC40EM10

| SERIES | MODULE SIZE/ CEILING | NOMINAL LUMENS | COLOR TEMP | DRIVER | VOLTAGE | STANDBY LIGHTING OPTIONS* | OPTIONS |
|--------|--|--|--|---|------------|------------------------------|--|
| LR105 | 24G 2X4 Module/Nema Type G/Lay- In Grid, 1" or 9/16" Fine Line. | 2600 3200 3700 4000 4600 5000 5700 7800 10,400 14,200 | 30K 35K 40K 50K Upon Request | 1% 0-10V 1% Dimming As Specified | UNI | BAC40EM10 (10W) | FLX 6Ft. Single Circuit Power Flex (Specify Voltage) FLX2 6Ft. 2-Circuit Power Flex (Specify Voltage) WL UL "Suitable for Wet Locations" labeled. |
| | | XXXX Custom Lumen Package. Contact Factory. | | | | | |

* All modules to be field mounted, factory wired with armored cable.
Contact factory for more details.

LUMEN PACKAGE

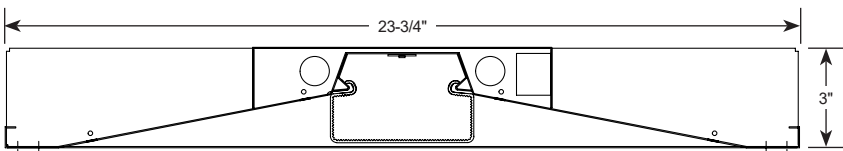
| Series | Module Size | Nominal Lumen Package | Color | Fixture Power (W) | Delivered Lumens | Fixture LPW | IC Rated | Standby Lighting Option |
|--------|-------------|-----------------------|-------|-------------------|------------------|-------------|----------|-------------------------|
| LR105 | 2X4 | | | | | | | |
| | | 2600 | 3000K | 19 | 2518 | 133 | ✓ | ✓ |
| | | 2600 | 3500K | 19 | 2601 | 137 | ✓ | ✓ |
| | | 2600 | 4000K | 19 | 2625 | 138 | ✓ | ✓ |
| | | 2600 | 5000K | 19 | 2625 | 138 | ✓ | ✓ |
| | | 3200 | 3000K | 23 | 3104 | 135 | ✓ | ✓ |
| | | 3200 | 3500K | 23 | 3207 | 139 | ✓ | ✓ |
| | | 3200 | 4000K | 23 | 3237 | 141 | ✓ | ✓ |
| | | 3200 | 5000K | 23 | 3237 | 141 | ✓ | ✓ |
| | | 3700 | 3000K | 27 | 3565 | 132 | ✓ | ✓ |
| | | 3700 | 3500K | 27 | 3684 | 136 | ✓ | ✓ |
| | | 3700 | 4000K | 27 | 3717 | 138 | ✓ | ✓ |
| | | 3700 | 5000K | 27 | 3717 | 138 | ✓ | ✓ |
| | | 4000 | 3000K | 29 | 3850 | 133 | ✓ | ✓ |
| | | 4000 | 3500K | 29 | 3978 | 137 | ✓ | ✓ |
| | | 4000 | 4000K | 29 | 4015 | 138 | ✓ | ✓ |
| | | 4000 | 5000K | 29 | 4015 | 138 | ✓ | ✓ |
| | | 4600 | 3000K | 35 | 4469 | 128 | ✓ | ✓ |
| | | 4600 | 3500K | 35 | 4616 | 132 | ✓ | ✓ |
| | | 4600 | 4000K | 35 | 4659 | 133 | ✓ | ✓ |
| | | 4600 | 5000K | 35 | 4659 | 133 | ✓ | ✓ |
| | | 5000 | 3000K | 38 | 4857 | 128 | ✓ | ✓ |
| | | 5000 | 3500K | 38 | 5018 | 132 | ✓ | ✓ |
| | | 5000 | 4000K | 38 | 5064 | 133 | ✓ | ✓ |
| | | 5000 | 5000K | 38 | 5064 | 133 | ✓ | ✓ |
| | | 5700 | 3000K | 44 | 5512 | 125 | ✓ | ✓ |
| | | 5700 | 3500K | 44 | 5695 | 129 | ✓ | ✓ |
| | | 5700 | 4000K | 44 | 5747 | 131 | ✓ | ✓ |
| | | 5700 | 5000K | 44 | 5747 | 131 | ✓ | ✓ |
| | | 7800 | 3000K | 58 | 7546 | 130 | ✓ | ✓ |
| | | 7800 | 3500K | 58 | 7740 | 133 | ✓ | ✓ |
| | | 7800 | 4000K | 58 | 7872 | 136 | ✓ | ✓ |
| | | 7800 | 5000K | 58 | 7872 | 136 | ✓ | ✓ |
| | | 10,400 | 3000K | 84 | 10,108 | 120 | - | - |
| | | 10,400 | 3500K | 84 | 10,368 | 123 | - | - |
| | | 10,400 | 4000K | 84 | 10,544 | 126 | - | - |
| | | 10,400 | 5000K | 84 | 10,768 | 128 | - | - |
| | | 14,200 | 3000K | 110 | 13,710 | 125 | - | - |
| | | 14,200 | 3500K | 110 | 14,044 | 128 | - | - |
| | | 14,200 | 4000K | 110 | 14,242 | 129 | - | - |
| | | 14,200 | 5000K | 110 | 14,584 | 133 | - | - |

Actual wattage may differ by +/- 5% when operating between 120V-277V +/- 10%.

PHOTOMETRICS:

All photometric reports are available at www.mercltg.com.

CROSS SECTIONS:



Detail

