

# **LR415 SERIES**

Architectural Recessed 2X2 LED Volume Luminaire Ultra-Shallow Design CCEA Option Available

| 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 computercontrolled operation from heavy gauge code grade cold rolled steel.
- Housing designed to meet all Chicago plenum requirements.
- Rivets hold all parts together for strength and unitv.
- A custom formulated non-glare white powder coating is applied to the housing after fabrication providing a reflectivity of at least 90%.

### DIFFUSER:

- Architectural hybrid-shape floating rounded profile design.
- Extruded from custom formulated high transmission acrylic material.
- · Linear ribbing for high LED performance.

### STANDBY LIGHTING OPTION:

- Self contained module, 7W, 10W or 12W as specified. 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 flange 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 single 7/8" hole for power connection is in accordance with Chicago Plenum requirements.
- · 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).
- CCEA Option meets the City of Chicago Environmental Air Specifications.

### **WARRANTY:**

- 5-year limited warranty is standard. Special 10-year warranty available on a job-to-job basis. Complete LED warranty terms available at <a href="https://www.mercltg.com"><u>www.mercltg.com</u></a>.
- 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 2X2 ambient LED luminaire featuring a single linear high transmission acrylic diffuser.
- · CCEA option available
- Architectural hybrid-shape floating rounded diffuser envelopes the LED light source allowing maximum light transmission while eliminating pixilations 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 133.
- American Made.







## LR415 SERIES

## Example: LR415-22G-3400-35K-1%-UNI-EM7

| LR415  | _ 22G .  | _                                      |                               | -                         | - UNI · | -                            | -  |
|--------|--|--|-------------------------------|---------------------------|---------|------------------------------|--|
| SERIES | MODULE SIZE/<br>CEILING  | NOMINAL<br>LUMENS                      | COLOR<br>TEMP                 | DRIVER                    | VOLTAGE | STANDBY<br>LIGHTING OPTIONS* | OPTIONS  |
| LR415  | 22G<br>2X2<br>Module/Nema<br>Type G/Lay-In<br>Grid,1" or<br>9/16" Fine | 2200<br>2600<br>3000                   | 30K<br>35K<br>40K             | 1%<br>0-10V 1%<br>Dimming | UNI     | EM7<br>EM10<br>EM12          | FLX<br>6Ft. Single<br>Circuit<br>Power Flex<br>(Specify Voltage) |
|        | Line.  | 3400<br>3800<br>4100                   | <b>50K</b><br>Upon<br>Request | Specified                 |         |                              | FLX2<br>6Ft. 2-Circuit<br>Power Flex<br>(Specify Voltage)        |
|        |  | 5200<br>7100                           |                               |                           |         |                              | WL<br>UL "Suitable for<br>Wet Locations"<br>labeled.             |
|        |  | Custom Lumen Package. Contact Factory. |                               |                           |         |                              | CCEA City of Chicago Environmental Air Specifications            |

## $^{\star}$ $\,$ All modules to be field mounted, factory wired with armored cable. Contact factory for more details.

### **LUMEN PACKAGE**

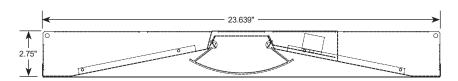
| Series | Module<br>Size | Nominal<br>Lumen<br>Package | Color | Fixture<br>Power<br>(W) | Delivered<br>Lumens | Fixture<br>LPW | IC<br>Rated | Standby<br>Lighting<br>Option |
|--------|----------------|-----------------------------|-------|-------------------------|---------------------|----------------|-------------|-------------------------------|
| LR415  | 2X2            |                             |       |                         |                     |                |             |                               |
|        |                | 2200                        | 3000K | 18                      | 2151                | 120            | ~           | ~                             |
|        |                | 2200                        | 3500K | 18                      | 2222                | 123            | ~           | ~                             |
|        |                | 2200                        | 4000K | 18                      | 2242                | 125            | ~           | ~                             |
|        |                | 2200                        | 5000K | 18                      | 2242                | 125            | ~           | ~                             |
|        |                | 2600                        | 3000K | 21                      | 2538                | 121            | ~           | ~                             |
|        |                | 2600                        | 3500K | 21                      | 2622                | 125            | ~           | ~                             |
|        |                | 2600                        | 4000K | 21                      | 2646                | 126            | ~           | ~                             |
|        |                | 2600                        | 5000K | 21                      | 2646                | 126            | ~           | ~                             |
|        |                | 3000                        | 3000K | 25                      | 2918                | 117            | ~           | ~                             |
|        |                | 3000                        | 3500K | 25                      | 3015                | 121            | ~           | ~                             |
|        |                | 3000                        | 4000K | 25                      | 3042                | 122            | ~           | ~                             |
|        |                | 3000                        | 5000K | 25                      | 3042                | 122            | ~           | ~                             |
|        |                | 3400                        | 3000K | 29                      | 3291                | 113            | ~           | ~                             |
|        |                | 3400                        | 3500K | 29                      | 3400                | 117            | ~           | ~                             |
|        |                | 3400                        | 4000K | 29                      | 3432                | 118            | ~           | ~                             |
|        |                | 3400                        | 5000K | 29                      | 3432                | 118            | ~           | ~                             |
|        |                | 3800                        | 3000K | 33                      | 3710                | 112            | ~           | ~                             |
|        |                | 3800                        | 3500K | 33                      | 3833                | 116            | ~           | ~                             |
|        |                | 3800                        | 4000K | 33                      | 3868                | 117            | ~           | ~                             |
|        |                | 3800                        | 5000K | 33                      | 3868                | 117            | ~           | ~                             |
|        |                | 4100                        | 3000K | 32                      | 3965                | 124            | ~           | ~                             |
|        |                | 4100                        | 3500K | 32                      | 4067                | 127            | ~           | ~                             |
|        |                | 4100                        | 4000K | 32                      | 4137                | 129            | ~           | ~                             |
|        |                | 4100                        | 5000K | 32                      | 4224                | 132            | ~           | ~                             |
|        |                | 5200                        | 3000K | 42                      | 5054                | 120            | ~           | ~                             |
|        |                | 5200                        | 3500K | 42                      | 5184                | 123            | ~           | ~                             |
|        |                | 5200                        | 4000K | 42                      | 5272                | 126            | ~           | ~                             |
|        |                | 5200                        | 5000K | 42                      | 5384                | 128            | ~           | ~                             |
|        |                | 7100                        | 3000K | 55                      | 6855                | 125            | ~           | ~                             |
|        |                | 7100                        | 3500K | 55                      | 7022                | 128            | ~           | ~                             |
|        |                | 7100                        | 4000K | 55                      | 7121                | 129            | ~           | ~                             |
|        |                | 7100                        | 5000K | 55                      | 7292                | 133            | ~           | ~                             |

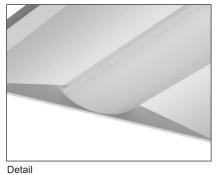
Actual wattage may differ by +/- 5% when operating between 120V-277V +/- 10%.

## PHOTOMETRICS:

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

## **CROSS SECTIONS:**





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