



# LR402 SERIES

## Architectural Recessed 2X2 LED Volume Luminaire Chicago Plenum 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.
- Housing designed to meet all Chicago plenum requirements.
- 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-curved profile design.
- Extruded from custom formulated high transmission acrylic material.
- Linear ribbing for high LED performance.

#### STANDBY LIGHTING OPTION:

- Remote-mount self-contained module, 7W, 10W or 12W as specified.
- Due to shallow depth of luminaire, module will need to be remotely mounted above ceiling line by contractor. Module is wired in and connected to luminaire with armored cable. Some limitations apply, contact factory for more details.
- Battery backup upon loss of power.

#### 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).
- Meets the City of Chicago Environmental Air (CCEA) 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 [www.mercltg.com](http://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 2X2 ambient LED luminaire featuring a single linear high transmission acrylic diffuser.
- Meets the requirements for Chicago Plenum use.
- Architecturally-curved 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 119.
- American Made.



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Fixture Type: \_\_\_\_\_

Job Information: \_\_\_\_\_

**ORDERING DATA:** Fill in boxes below with corresponding bold options.

Example: LR402-22G-3400-35K-1%-UNI-EM7R

SERIES	MODULE SIZE/CEILING	NOMINAL LUMENS	COLOR TEMP	DRIVER	VOLTAGE	STANDBY LIGHTING OPTIONS*	OPTIONS
<b>LR402</b>	<b>22G</b> 2X2 Module/ Nema Type G/Lay-In Grid, 1" or 9/16" Fine Line.	<b>2200</b> <b>2600</b> <b>3000</b> <b>3400</b> <b>3800</b> <b>4100</b> <b>5500</b> <b>XXXX</b> Custom Lumen Package. Contact Factory.	<b>30K</b> <b>35K</b> <b>40K</b> <b>50K</b> Upon Request	<b>1%</b> 0-10V 1% Dimming _____ As Specified	<b>UNI</b>	<b>EM7R</b> <b>EM10R</b> <b>EM12R</b>	<b>FLX</b> 6Ft. Single Circuit Power Flex (Specify Voltage)  <b>FLX2</b> 6Ft. 2-Circuit Power Flex (Specify Voltage)  <b>WL</b> UL "Suitable for Wet Locations" labeled.

## LUMEN PACKAGE

SERIES	MODULE SIZE	Nominal Lumen Package	Color	Fixture Power (W)	Delivered Lumens	Fixture LPW	IC Rated	Standby Lighting Option
LR402	2X2							
		2200	3000K	19	2181	112	✓	✓
		2200	3500K	19	2181	112	✓	✓
		2200	4000K	19	2265	117	✓	✓
		2200	5000K	19	2305	119	✓	✓
		2600	3000K	24	2565	109	✓	✓
		2600	3500K	24	2618	111	✓	✓
		2600	4000K	24	2685	114	✓	✓
		2600	5000K	24	2700	114	✓	✓
		3000	3000K	28	2918	106	✓	✓
		3000	3500K	28	2978	108	✓	✓
		3000	4000K	28	3055	111	✓	✓
		3000	5000K	28	3070	111	✓	✓
		3400	3000K	32	3320	103	✓	✓
		3400	3500K	32	3390	105	✓	✓
		3400	4000K	32	3475	108	✓	✓
		3400	5000K	32	3494	108	✓	✓
		3800	3000K	36	3630	100	✓	✓
		3800	3500K	36	3707	102	✓	✓
		3800	4000K	36	3800	105	✓	✓
		3800	5000K	36	3820	106	✓	✓
		4100	3000K	36	3980	110	✓	✓
		4100	3500K	36	4107	113	✓	✓
		4100	4000K	36	4190	115	✓	✓
		4100	5000K	36	4231	117	✓	✓
		5500	3000K	51	5315	104	✓	✓
		5500	3500K	51	5481	108	✓	✓
		5500	4000K	51	5592	110	✓	✓
		5500	5000K	51	5647	111	✓	✓

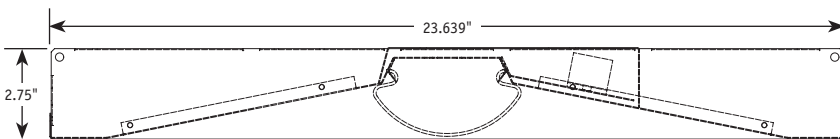
\* All modules to be field mounted, factory wired with armored cable. Contact factory for more details.

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

## PHOTOMETRICS:

All photometric reports are available at [www.mercltg.com](http://www.mercltg.com).

## CROSS SECTIONS:



Detail

