



# LR405 SERIES

## Architectural Recessed 2X4 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-squared 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).
- 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 2X4 ambient LED luminaire featuring a single linear high transmission acrylic diffuser.
- Meets the requirements for Chicago Plenum use.
- Architecturally-squared diffuser envelops 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 129.
- American Made.



## LR405 SERIES

Fixture Type:

Job Information:

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

Example: LR405-24G-5700-35K-1%-UNI-EM7

SERIES	MODULE SIZE/CEILING	NOMINAL LUMENS	COLOR TEMP	DRIVER	VOLTAGE	STANDBY LIGHTING OPTIONS	OPTIONS
LR405	24G 2X4 Module/ Nema Type G/Lay-In Grid, 1" or 9/16" Fine Line.	2600 3200 3700 4200 4600 5700 7800 11100 XXXX Custom Lumen Package. Contact Factory.	30K 35K 40K 50K Upon Request	1% 0-10V 1% Dimming As Specified	UNI	EM7 EM10 EM12	FLX 6Ft. Single Circuit Power Flex (Specify Voltage) FLX2 6Ft. 2-Circuit Power Flex (Specify Voltage) WL UL "Suitable for Wet Locations" labeled.

### LUMEN PACKAGE

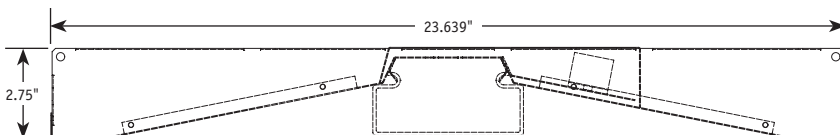
SERIES	MODULE SIZE	Nominal Lumen Package	Color	Fixture Power (W)	Delivered Lumens	Fixture LPW	IC Rated	Standby Lighting Option
LR405	2X4							
		2600	3000K	24	2400	102	✓	✓
		2600	3500K	24	2493	106	✓	✓
		2600	4000K	24	2626	111	✓	✓
		2600	5000K	24	2626	111	✓	✓
		3200	3000K	25	3110	122	✓	✓
		3200	3500K	25	3110	122	✓	✓
		3200	4000K	25	3225	127	✓	✓
		3200	5000K	25	3285	129	✓	✓
		3700	3000K	30	3530	119	✓	✓
		3700	3500K	30	3530	119	✓	✓
		3700	4000K	30	3660	123	✓	✓
		3700	5000K	30	3730	126	✓	✓
		4200	3000K	35	4032	115	✓	✓
		4200	3500K	35	4032	115	✓	✓
		4200	4000K	35	4185	119	✓	✓
		4200	5000K	35	4260	121	✓	✓
		4600	3000K	39	4464	112	✓	✓
		4600	3500K	39	4464	112	✓	✓
		4600	4000K	39	4630	117	✓	✓
		4600	5000K	39	4715	119	✓	✓
		5700	3000K	51	5485	107	✓	✓
		5700	3500K	51	5600	110	✓	✓
		5700	4000K	51	5743	112	✓	✓
		5700	5000K	51	5770	113	✓	✓
		7800	3000K	75	7523	100	✓	✓
		7800	3500K	75	7680	101	✓	✓
		7800	4000K	75	7877	104	✓	✓
		7800	5000K	75	7917	105	✓	✓
		11,100	3000K	102	10630	104	-	-
		11,100	3500K	102	10962	107	-	-
		11,100	4000K	102	11184	109	-	-
		11,100	5000K	102	11294	110	-	-

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

### PHOTOMETRICS:

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

### CROSS SECTIONS:



Detail

