



# LR405 SERIES

Architectural Recessed  
2X4 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 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).
- 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 [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.
- CCEA option available
- 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 141.
- American Made.



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

SERIES	MODULE SIZE/CEILING	NOMINAL LUMENS	COLOR TEMP	DRIVER	VOLTAGE	STANDBY LIGHTING OPTIONS	OPTIONS
<b>LR405</b>	<b>24G</b> 2X4 Module/ Nema Type G/Lay-In Grid, 1" or 9/16" Fine Line.	<b>2600</b> <b>3200</b> <b>3700</b> <b>4000</b> <b>4600</b> <b>5000</b> <b>5700</b> <b>7800</b> <b>10,400</b> <b>14,200</b>	<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>EM7</b> <b>EM10</b> <b>EM12</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.  <b>CCEA</b> City of Chicago Environmental Air Specifications.
		<b>XXXX</b> Custom Lumen Package. Contact Factory.					

## LUMEN PACKAGE

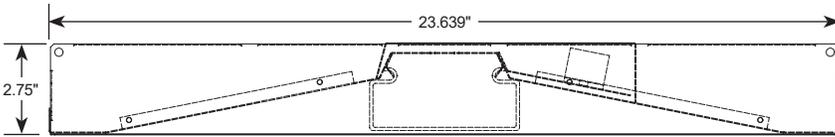
Series	Module Size	Nominal Lumen Package	Color	Fixture Power (W)	Delivered Lumens	Fixture LPW	IC Rated	Standby Lighting Option
LR405	2X4							
		2600	3000K	19	2518	133	✓	✓
		2600	3500K	19	2601	137	✓	✓
		2600	4000K	19	2625	138	✓	✓
		2600	5000K	19	2625	138	✓	✓
		3200	3000K	23	3104	135	✓	✓
		3200	3500K	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](http://www.mercltg.com).

## CROSS SECTIONS:



Detail

