

# **LR402 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 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 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:

- 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">www.mercltg.com</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 2X4 ambient LED luminaire featuring a single linear high transmission acrylic diffuser.
- · CCEA option available
- 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 141.
- · American Made.







# Example: LR402-24G-5700-35K-1%-UNI-EM7

#### LR402 24G UNI COLOR TEMP MODULE NOMINAL STANDBY LIGHTING OPTIONS OPTIONS SERIES DRIVER VOLTAGE SIZE/CEILING LUMENS LR402 24G 1% UNI EM7 2600 30K **FLX** 2X4 Module/ Nema Type G/Lay-In Grid,1" or 9/16" Fine Line. 6Ft. Single Circuit Power Flex (Specify Voltage) 0-10V 1% Dimming 3200 35K **EM10** 3700 40K **EM12** As Specified 4000 50K FLX2

#### **LUMEN PACKAGE**

City of Chicago Environmental Air Specifications

Series	Module Size	Nominal Lumen Package	Color	Fixture Power (W)	Delivered Lumens	Fixture LPW	IC Rated	Standby Lighting Option
LR402	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	_	_

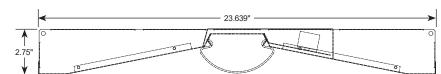
# 4600 5000 5700 7800 10,400 14,200 Custom Lumen Package Contact Factory.

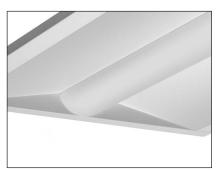
# 6Ft. 2-Circuit Power Flex (Specify Voltage) Upon Request WL UL "Suitable for Wet Locations" labeled. **CCEA**

# PHOTOMETRICS:

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

### **CROSS SECTIONS:**





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

Detail

