LR302 smartengine | wtec SERIES

Architectural Recessed
2x4 LED Volume Luminaire
Ultra-Shallow Design
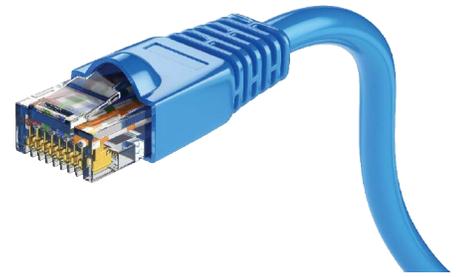
Fixture Type:

Job Information:

Delivering Up To
141
Lumens Per Watt

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.

smartengine

• Network Powered Lighting delivers 18-48V and 150-700mA to power control light fixtures from a central smartengine device.
• No driver, node or active component at the fixture level.
• Factory or field programmable for custom drive currents offering desired lumen-per-foot performance.
• Integrated smartsensor or an RJ45 whip for external smartsensor.
• Smartsensor provides temperature, motion, light level, energy consumption and optimal BLE.
• Each channel will require a home run back to the smartengine.

Housing

• All metal parts are fabricated in a computer-controlled operation from heavy gauge code grade cold rolled steel.
• 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%.
• Optional heat removal feature; a series of slots in the housing allows ambient room air/heat to be vented to the plenum.

Diffuser

• Architecturally-curved profile design.
• Extruded from custom formulated high transmission acrylic material.
• Linear ribbing or high LED performance.

Emergency Lighting - Optional

• smartengine is UL924 Listed.

Installations

• Designed for installation into NEMA Type G lay-in acoustical grid ceiling systems, 15/16" 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 quick wiring access plate is located on back of the housing. Additional knockouts provided.
• 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).

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.
• 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:

• Network Powered Lighting via smartengine by wtec.
• Tunable White feature via smartengine's human centric lighting system.
• Ultra-shallow recessed 2x4 ambient LED luminaire featuring a single linear high transmission acrylic diffuser.
• 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.
• Optional heat removal feature allows ambient room air/heat to be vented to plenum.
• American Made.

Made in USA

POWERED BY **NPL** NETWORK POWERED LIGHTING

MERCURY LIGHTING PRODUCTS CO. INC.

| Series	Module Size/ Ceiling	Drive Current	Lumen Output	Number of Channels	Color Temp	Options
LR302	**24G** 2x4 Module/ Nema Tyoe G/ Lay-in Grid, 15/16: or 9/16" Fine Line.	**500** **700** **1000** **1300** ___ Custom Lumen Package. Contact Factory.	**3150L / 23W** **4350L / 33W** **6050L / 48W** **7700L / 64W** ___ Custom Lumen Package. Contact Factory.	**1 CH** **1 CH** **2 CH** **2 CH**	**30K** **35K** **40K** **50K** Upon Request	**FLX** 6 Ft. Single Circuit Power Flex (Specify Voltage) **FLX 2** 6 Ft. 2-Circuit Power Flex (Specify Voltage) **WL** UL "Suitable for Wet Locations" labeled. **HR** Heat Removal Housing

One Channel View

RJ45 Port from fixture to Gateway

Smartsensor
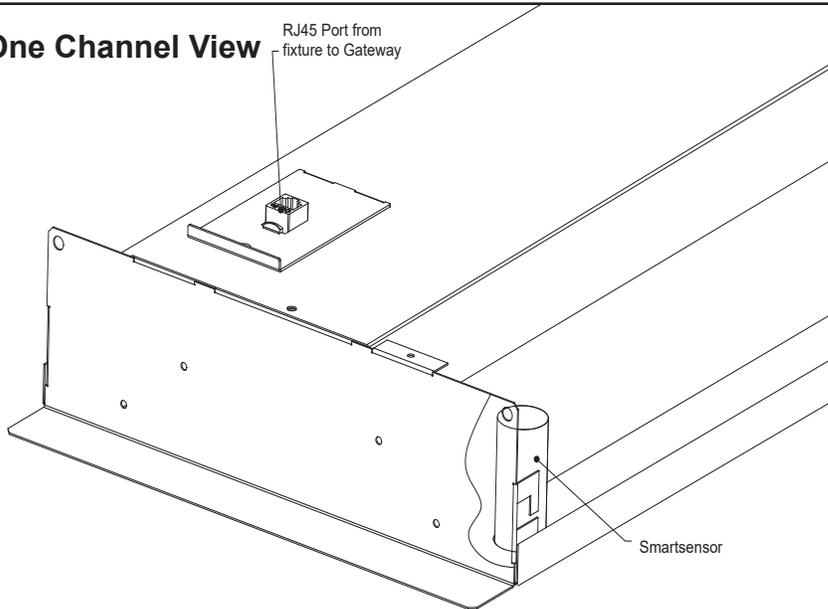
Lumen Package

SERIES	MODULE SIZE	NOMINAL LUMEN PACKAGE	COLOR	FIXTURE POWER (W)	DELIVERED LUMENS	FIXTURE LPW	IC RATED	STANDBY LIGHTING OPTION
LR302	2x4							
		3150	3000	23	3053	133	X	X
		3150	3500	23	3147	137	X	X
		3150	4000	23	3210	140	X	X
		3150	5000	23	3241	141	X	X
		4350	3000	33	4198	127	X	X
		4350	3500	33	4328	131	X	X
		4350	4000	33	4415	134	X	X
		4350	5000	33	4458	135	X	X
		6050	3000	48	5849	122	X	X
		6050	3500	48	6030	126	X	X
		6050	4000	48	6151	128	X	X
		6050	5000	48	6211	129	X	X
		7700	3000	64	7436	116	X	X
		7700	3500	64	7666	120	X	X
		7700	4000	64	7819	122	X	X
		7700	5000	64	7896	123	X	X

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

Two Channel View

Two RJ45 Ports from Gateway to smartengine

Gateway

Smartsensor
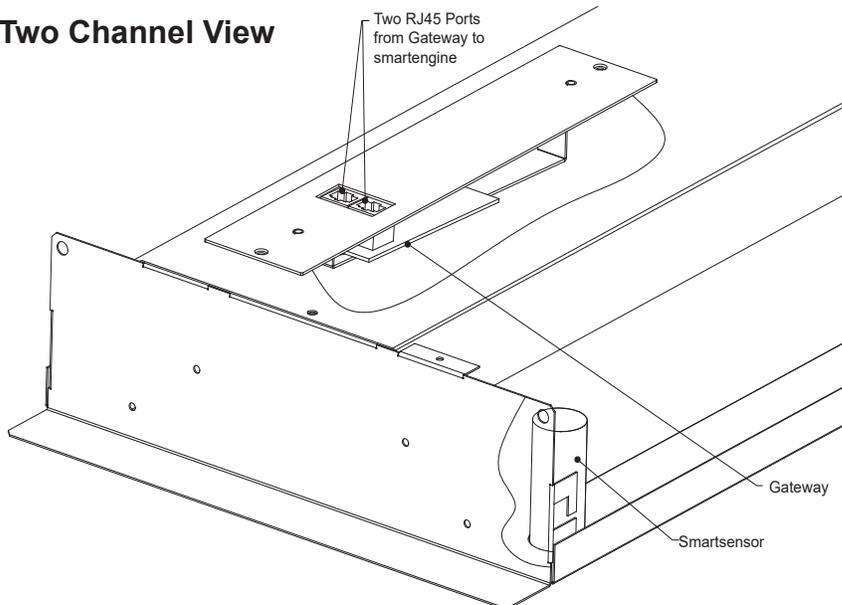
Photometrics

All photometric reports are available at mercltg.com.

Cross Sections

23.75"

3.50"

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