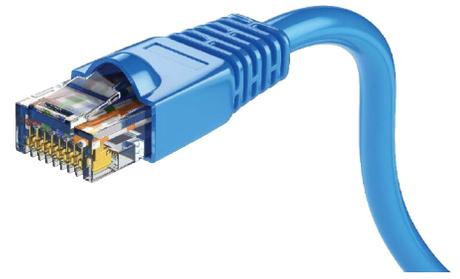


LR302 smartengine | wtec SERIES

Architectural Recessed
2x2 LED Volume Luminaire
Ultra-Shallow Design



Fixture Type:

Job Information:



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:

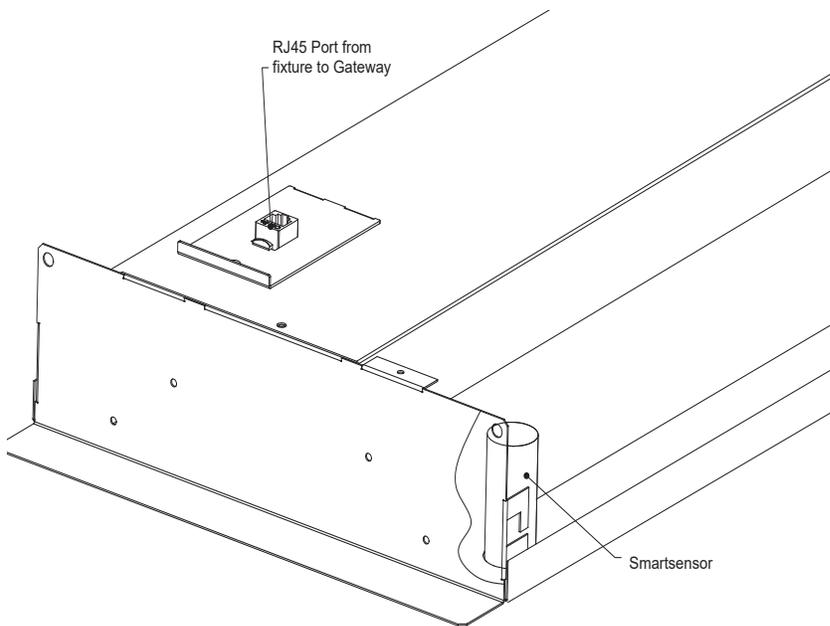
- Network Powered Lighting via smartengine by wtec.
- Tunable White feature via smartengine's human centric smart lighting.
- Ultra-shallow recessed 2x2 ambient LED luminaire featuring a single linear high transmission acrylic diffuser.
- Architecturally-curved diffuser envelopes the LED light source 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 130.
- Optional heat removal feature allows ambient room air/heat to be vented to plenum.
- American Made.





LR302		22G							
Series	Module Size/ Ceiling	Drive Current	Lumen Output	Number of Channels	Color Temp	Options			
LR302	22G 2x2 Module/ Nema Tyoe G/ Lay-in Grid, 15/16; or 9/16" Fine Line.	350 500 650	2170L / 18W 3020L / 24W 3840L / 32W	1 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			
		Custom Lumen Package. Contact Factory.	Custom Lumen Package. Contact Factory.						

One Channel View



Lumen Package

SERIES	MODULE SIZE	NOMINAL LUMEN PACKAGE	COLOR	FIXTURE POWER (W)	DELIVERED LUMENS	FIXTURE LPW	IC RATED	STANDBY LIGHTING OPTION
LR302	2x2							
		2170	3000	18	2019	120	X	X
		2170	3500	18	2164	124	X	X
		2170	4000	18	2207	126	X	X
		2170	5000	18	2273	130	X	X
		3020	3000	24	2925	122	X	X
		3020	3500	24	3015	126	X	X
		3020	4000	24	3075	128	X	X
		3020	5000	24	3105	130	X	X
		3840	3000	32	3718	117	X	X
		3840	3500	32	3833	121	X	X
		3840	4000	32	3909	123	X	X
		3840	5000	32	3948	124	X	X

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

Photometrics

All photometric reports are available at mercltg.com.

Cross Sections

