

FEATURES & SPECIFICATIONS

INTENDED USE — The 2VTL4R LED Relight assembly is the ideal solution for renovating existing fluorescent troffer and parabolic systems, delivering improved quality of light and refreshing the space. VTLR volumetric lighting eliminates the “cave effect” by delivering the ideal amount of light to walls, work surfaces, and people. The 2VTL4R Relight assembly is recommended for offices, schools, hospitals, and other general lighting applications where existing 2x4 troffer and parabolic fluorescent fixtures are currently in use.

CONSTRUCTION — Universal end brackets are constructed of 20-gauge powder-painted steel and are secured to the host fixture with provided tek screws. End brackets are painted black or white to match existing parabolic or troffer door frame reveals. The LED light engine is 20-gauge powder painted steel and is wired to the supply voltage using a driver-disconnect plug system provided as standard. A steel wiring connection cover is provided for use if required.

The door frame and reflector assembly is vaulted cold-rolled steel with embossed facets and is painted after fabrication. Impact-modified, single clear acrylic diffuser provides excellent shielding and wide distribution.

OPTICS — Volumetric illumination is delivered by creating an optimal mix of light to walls, partitions, vertical and horizontal work surfaces — rendering the interior space, objects and occupants in a more balanced, complementary luminous environment. Linear faceted reflector cavity softens and distributes light into the space while minimizing luminous contrast between the fixture and ceiling. Sloped end plates provide a smooth, luminous transition between fixture and ceiling while enhancing the perception of fixture depth.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 90% LED lumen maintenance at 60,000 hours (L90/60,000).

eldoLED driver options deliver choice of dimming range and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Optional integrated nLight® controls make each luminaire addressable — allowing it to digitally communicate with other nLight-enabled controls such as dimmers, switches, occupancy sensors and photocontrols. Simply connect all the nLight-enabled control devices and the 2VTL4R luminaires using standard Cat-5 cabling. Unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission.

Lumen Management: Unique lumen management system (option N80) provides onboard intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting.

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

Driver disconnect provided where required to comply with US and Canadian codes.

INSTALLATION — After existing fluorescent components are removed from housing, universal end brackets are fastened in place with tek screws. The LED light engine assembly mounts to the end brackets and hangs securely while the wiring connection is made using a driver-disconnect plug system provided as standard. The light engine then swings up into position and is secured in place with a captive screw at each end. The doorframe is then inserted via a sliding hinge into the end bracket and secured in the closed position with a rotating cam latch. Light engine may be removed from fixture during service. LED boards include plug-in connectors for easy replacement or servicing. Suitable for damp location installations.

LISTINGS — UL/cUL classified for use in recessed fluorescent light fixtures. Installation per instructions will not impact existing fixture UL listing. Tested to LM80 standards.

VT SERIES
RELIGHT

Volumetric Troffer



2VTL4R
2VTL4RT

2' x 4' Relight
LED

eldoLED

Specifications

Designed to convert most existing recessed parabolic and lensed troffers.

product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products . Protected by one or more of US Patent Nos. 7,229,192; D541,467; D541,468; D544,633; D544,634; D544,992. D544,933 and additional patents pending.

WARRANTY — 5-year limited warranty.

Actual performance may differ as a result of end-user environment and application
All values are design or typical values, measured under laboratory conditions at 25 °C.

Note: Specifications subject to change without notice.

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: 2VTL4R 40L ADP EZ1 LP835

Series	Lumens ¹	ADP Diffuser	Voltage	Driver	Color temperature	Controls
2VTL4R	2x4 LED relight assembly, black end brackets for use in parabolic fixture	ADP Acrylic linear prismatic	(blank) MVOLT (120 - 277V)	EZ1 eldoLED, dims to 1%	LP835 82 CRI, 3500 K	(blank) No controls
	40L 4000		347 347V ²	EZB Dims to dark	LP840 82 CRI, 4000 K	N80 N-light with 80% lumen management ⁴
2VTL4RT	2x4 LED relight assembly, white end brackets for use in troffer fixture			GTH250 Bi-level (2-switch)	LP830 82 CRI, 3000 K	N100 N-light with no lumen management ⁴
	48L 4800			EXA1 Dims to 1%, XPoint wireless enabled ³	LP850 82 CRI, 5000 K	N80EMG N-light with 80% lumen management for use with generator supply EM power ^{4,5}
2VTL4RF	2x4 LED relight assembly, flange brackets for drywall installation			EXAB Dims to dark, XPoint wireless enabled ³		N100EMG N-light without lumen management for use with generator supply EM power ^{4,5}
	60L 6000					

Notes

- 1 Approximate lumen output.
- 2 Option ships separately as a field-installed accessory. Not available with GTH250 driver option. Verify compliance with local codes prior to ordering.
- 3 Gateway not included. Requires on-site commissioning.
- 4 Only available with EZ1 or EZB drivers.
- 5 nLight EMG option requires a connection to existing nLight network Power is provided from a separate N80 or N100 enabled fixture.

2VTL4R Volumetric Recessed Lighting 2'x4'

Energy Comparison - 2x4 LED vs. T12 & T8				
System	Lamp type	Ballast factor	Input watts ¹	Watts saved by using LED
2VTL4R 40L	LED	1.0	38	---
4-lamp T12	F40T12	0.88	144	106
4-lamp T8	F32T8	0.88	110	72
3-lamp T12	F40T12	0.88	108	70
3-lamp T8	F32T8	0.88	90	52
2-lamp T12	F40T12	0.88	72	34
2-lamp T8	F32T8	0.88	60	22

Notes

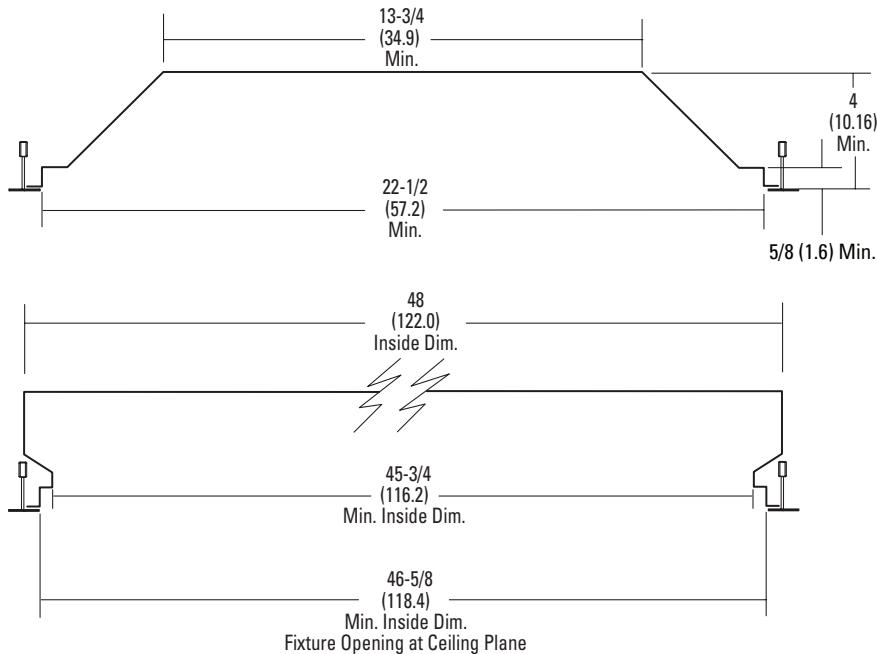
- Actual wattage may differ by +/- 5% when operating between 120-277V +/- 10%.

Performance Data			
Lumen Package	Lumens	Input Watts ¹	LPW
30L LP830	3168	30.76	103
30L LP835	3326	30.75	108
30L LP840	3677	30.9	119
30L LP850	3666	31.04	118
40L LP830	3992	38.98	102
40L LP835	4211	39.2	107
40L LP840	4315	39.3	110
40L LP850	4623	39.39	117
48L LP830	4619	46.43	99
48L LP835	4879	46.64	105
48L LP840	4993	46.81	107
48L LP850	5354	46.87	114
60L LP830	5069	52.15	97
60L LP835	5351	52.42	102
60L LP840	5500	52.55	105
60L LP850	5868	52.71	111
72L LP830	6752	69.25	97
72L LP835	6885	69.87	98
72L LP840	7395	69.83	106
72L LP850	7804	70.16	111

FIT COMPATIBILITY

The 2VTL4R Relight assembly was engineered to upgrade recessed 2X4 fixtures, including most parabolic and lensed troffers from all major manufacturers.

Dimensional requirements are below but Lithonia Lighting recommends a trial installation prior to purchasing project quantities.



Relight assemblies are designed to fit most recessed fixtures mounted in T-grid installations. For surface mounted fixtures or for fixtures mounted in ceiling types other than T-grids, consult factory before ordering.

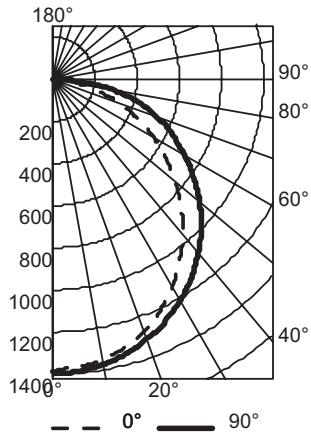
Dimensions are inches (centimeters) unless otherwise noted.

2VTL4R-2X4

2VTL4R Volumetric Recessed Lighting 2'x4'

PHOTOMETRICS

2VTL4R 40L EZ1 LP835, 4125.9 delivered lumens, test no. LTL25401P, tested in accordance to IESNA LM-79



CP Summary			Coefficients of Utilization									Zonal Lumen Summary					
	0°	90°	pf	20%						50%			Zone	Lumens	% Lamp	% Fixture	
			pc	80%			70%			50%							
			pw	70%	50%	30%	50%	30%	10%	50%	30%	10%					
	0°	1389	1389	0	119	119	119	116	116	116	111	111	111	0° - 30°	1077	26.1	26.1
	5°	1370	1391	1	108	103	98	101	97	93	96	93	90	0° - 40°	1762	42.7	42.7
	15°	1318	1348	2	98	89	82	87	81	75	84	78	73	0° - 60°	3136	76.0	76.0
	25°	1208	1266	3	89	78	70	76	69	62	73	67	61	0° - 90°	4125	100.0	100.0
	35°	1051	1148	4	81	69	60	68	59	53	65	58	52	90° - 120°	0	0.0	0.0
	45°	862	995	5	75	62	52	60	52	45	58	51	45	90° - 130°	0	0.0	0.0
	55°	658	818	6	69	55	46	54	46	39	53	45	39	90° - 150°	0	0.0	0.0
	65°	445	629	7	64	50	41	49	41	35	48	40	34	90° - 180°	0	0.0	0.0
	75°	236	418	8	59	46	37	45	37	31	44	36	31	0° - 180°	4126	100.0	100.0
	85°	55	119	9	56	42	34	41	33	28	40	33	28				
	90°	3	1	10	52	39	31	38	30	25	37	30	25				