

## FEATURES & SPECIFICATIONS

**INTENDED USE** — The 2GTL LED recessed troffer offers a wide range of lumen packages, color temperatures, and lens options to meet the lighting needs for a wide range of applications such as schools, offices, and hospitals. The light engine delivers long life and excellent color to ensure a sound quality, low-maintenance lighting installation.

**Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.** [Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)

**CONSTRUCTION** — Housing formed from 22 gauge cold-rolled steel. Smooth hemmed sides and smooth inward formed end flanges for safe handling. Includes integral T-bar clips. Lighter-weight fixture allows for safe, easy installation.

**OPTICS** — Highly transmissive pattern #12 lens diffuses the light source without compromising output. Pattern # 19 and satin white lens options also available.

**ELECTRICAL** — Long-life LEDs, coupled with high-efficiency drivers, provide extended service life. 80% LED lumen maintenance at 72,000 hours (L80/72,000).

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 nLight® embedded 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 GTL 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.

The step-level dimming option (SLD) allows the system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

Ballast disconnect is provided where required to comply with U.S. and Canadian codes.

**INSTALLATION** — The GTL fits into standard 15/16" and narrow 9/16" T-Grid ceiling systems. LED boards include plug-in connectors for easy of upgradeability. Suitable for direct insulation contact. Suitable for damp location.

**LISTINGS** — CSA certified to meet U.S. and Canadian standards. IC rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

**GOVERNMENT PROCUREMENT** — BAA — Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA — Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** 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.

Specifications subject to change without notice.

Catalog Number
Notes
Type

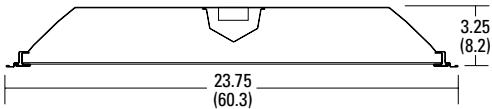


### Specifications

Length: 47.75 (121.3)

Width: 23.75 (60.3)

Depth: 3.25 (8.2)



All dimensions are inches (centimeters) unless otherwise indicated.

### A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

# 2GTL LED Troffer



A+ Capable options indicated by this color background.

## ORDERING INFORMATION

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

**Example:** 2GTL 4 48L GZ10 LP835

2GTL							
Series	Trim type	Length	Lumens <sup>1</sup>	Door	Lens	Voltage	
2GTL 2' wide recessed LED luminaire	(blank) Grid F Overlapping flange	4' 4'	30L 3000 lumens 40L 4000 lumens 48L 4800 lumens 60L 6000 lumens 72L 7200 lumens 88L 8800 lumens 100L 10000 lumens 140L 14000 lumens <sup>2</sup>	(blank) Flush steel, white FN Flush aluminum, natural FM Flush aluminum, matte black FW Flush aluminum, white RN Regressed aluminum, natural RM Regressed aluminum, matte black RW Regressed aluminum, white	(blank) #12 pattern acrylic, 0.110" thick A12125 #12 pattern acrylic, frosted, .125" thick A19 #19 pattern acrylic, 0.156" thick SWL Satin white	(blank) MVOLT (120-277V) 120 120V 277 277V 347 347V <sup>3</sup>	

Driver	Color temperature	Controls <sup>4</sup>	Options
EZ1 eldoLED dims to 1% (0-10V dimming)	LP830 3000 K	(blank) No controls	BDP Disconnect Plug
GZ10 Dims to 10% (0-10V dimming)	LP835 3500 K	N80 nLight with 80% (L80) lumen management	E7W 7W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch ( <a href="#">LINK</a> ) <sup>5,7,8</sup>
GZ1 Dims to 1% (0-10V dimming)	LP840 4000 K	N80EMG nLight with 80% (L80) lumen management for use with generator supply emergency power	E10W Emergency battery pack, 10W Linear Constant Power, Certified in CA Title 20 MAEDBS, CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch ( <a href="#">LINK</a> ) <sup>5,7,8</sup>
SLD Step-level dimming <sup>4,5</sup>	LP850 5000 K	N100 nLight without lumen management N100EMG nLight without lumen management for use with generator supply emergency power	BGTD Bodine Generator Transfer Device <sup>9,10,11</sup> CP Chicago plenum <sup>12</sup> PWS1836 6' pre-wire, 3/8" diameter, 18-gauge, 1-circuit PWS1846 6' pre-wire, 3/8" diameter, 18-gauge, 2-circuit PWS1846 PWSLV Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge <sup>13</sup> PWS1856LV 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/ low voltage wires <sup>13</sup> ABC Door frame gasketing <sup>14</sup> GLR Fast-blowing fuse <sup>15</sup> GMF Slow-blowing fuse <sup>15</sup> LATC Earthquake clip NPLT Narrow pallet PAF Paint after fab BAA Buy America(n) Act and/or Build America Buy America Qualified

Accessories: Order as separate catalog number.	
DGA24	Drywall grid adapter for 2x4 recessed fixture.
2X4SMKSHP PAF	Surface Mount Troffer Kit Post Paint
RK8BDP 2P U	Disconnect Plug (BDP), 2 Pole, Package of 1
RK8BDP 3P U	Disconnect Plug (BDP), 3 Pole, Package of 1
RK8BDP 2P J10	Disconnect Plug (BDP), 2 Pole, Package of 10
RK8BDP 2P J40	Disconnect Plug (BDP), 2 Pole, Package of 40

### Notes

- 1 Approximate lumen output. Lumen output will vary depending upon lens option chosen.
- 2 Not available with GZ10.
- 3 Not available with SLD, E7W, E10W, or BGTD.
- 4 Not available with 100L and 140L.
- 5 When using pre-wire option, use PWS1846.
- 6 Not available with SLD, GZ1, GZ10.
- 7 Not available with SLD or GZ1 or GZ10 when combined with any of the following lumen packages: 72L, 88L, 100L or 140L.
- 8 Not available with EZ1 when combined with 100L or 140L lumen packages.

- 9 Not Available with SLD. When using a pre-wire option, use PWS1846 or PWS1846 PWSLV.
- 10 Not Available with Controls options when ordered in combination with 100L or 140L lumen packages.
- 11 Must specify voltage. Requires [BSE labeling](#), voltage specific.
- 12 Not available with PWS1836, PWS1846, PWS1856LV, or PWS1846 PWSLV.
- 13 Not available with individual controls.
- 14 Only available with aluminum door.
- 15 Must specify voltage, 120 or 277.

## Emergency Battery Pack Options – Field Installable

Battery Model Number	Wattage	Runtime (Minutes)	Lumen Output* @ 120 Lumens/Watt	Other
ILB CP07 2H A	7W	120	840	Storm Shelter / 2 Hour Runtime
ILB CP10 A	10W	90	1200	
ILB CP10 HE AELR A	10W	90	1200	Title 20; Enabled with Self Testing, Automated Reporting (STAR)
ILBLP CP10 HE SDA	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SDA	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SDA	20W	90	2400	Title 20, Self Diagnostic

All the above are UL Listed products that are certified for field install external/remote to the fixture.

\*Minimum delivered lumen output to assist in product selection for increased fixture mounting height.

The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.

Please contact us at [techsupport@iotaengineering.com](mailto:techsupport@iotaengineering.com) for any Emergency Battery related questions.



2GTL 2X4

## Enabled with STAR

**Emergency Lighting with Self-Testing Automated Reporting (STAR)**, enables self-testing and automated reporting to aid in life safety code compliance. Build your solution and choose your preferred deployment from Mobile STAR, where test data is logged in each individual unit and broadcast to the **ClAIRity™+** app, or Connected STAR, where test data is logged in the STAR Gateway by IOTA® and emailed directly. **Leave the ladders, disruptions and written records behind with emergency lighting solutions with STAR!**

**Life Safety Code NFPA 101 testing and reporting requirements for emergency lighting include:**



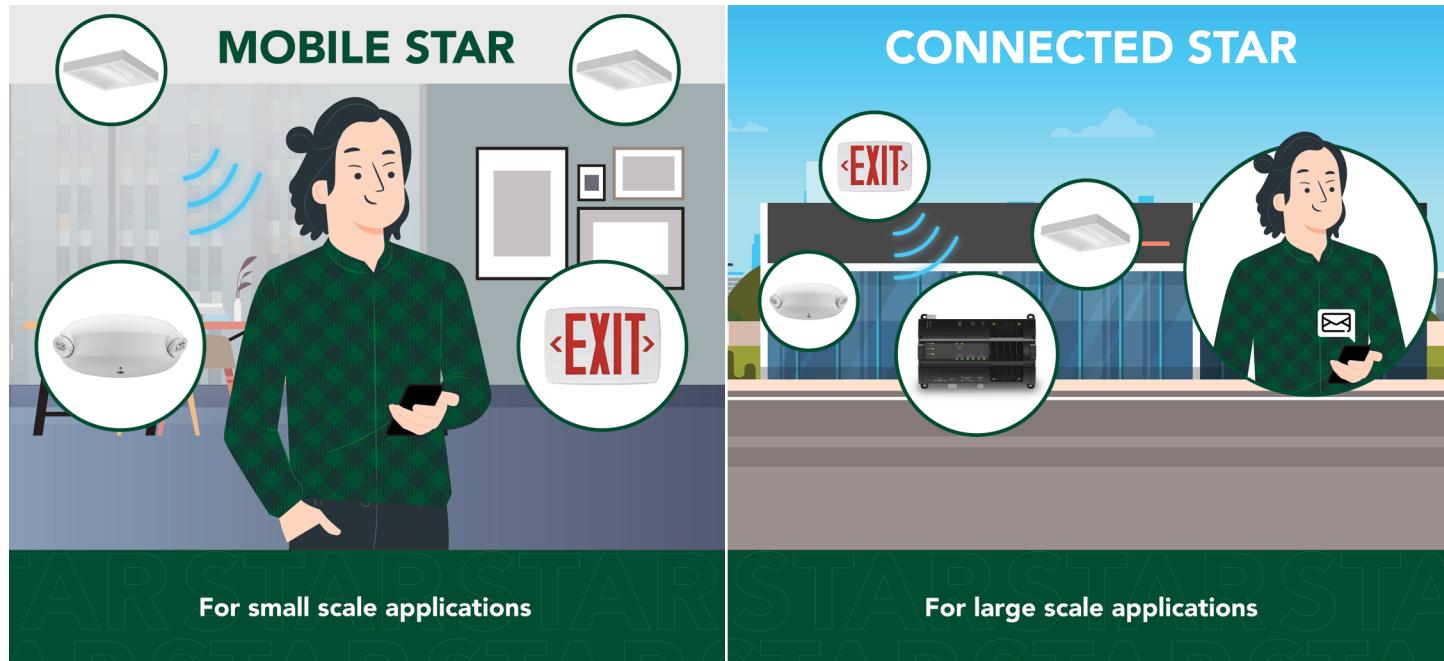
Testing for 30 seconds every 30 days



Testing for 90 minutes once a year



Record keeping and to report to the authority having local jurisdiction



Stock/Non-configurable models are offered for shorter lead times:

#### ORDERING INFORMATION

Catalog Number	UPC	Description	Lumens	Color Temperature	Voltage	Wattage	Pallet qty.	Standard carton qty.
2GTL4 4400LM LP835	889804706598	2x4 LED lay-in troffer	4391	3500K	120-277	34.10	28	1
2GTL4 4400LM LP840	889804706956	2x4 LED lay-in troffer	4567	4000K	120-277	34.10	28	1
2GTL4 4400LM 347 LP835	889804710243	2x4 LED lay-in troffer, 347v	4391	3500K	347	38.11	28	1
2GTL4 4400LM 347 LP840	889804710359	2x4 LED lay-in troffer, 347v	4567	4000K	347	38.11	28	1
2GTL4 4400LM E10W LP835	889804710045	2x4 LED lay-in troffer, emergency battery	4391	3500K	120-277	34.10	28	1
2GTL4 4400LM E10W LP840	889804710205	2x4 LED lay-in troffer, emergency battery	4567	4000K	120-277	34.10	28	1
2GTL4 5000LM LP835	889804710366	2x4 LED lay-in troffer	4867	3500K	120-277	38.79	28	1
2GTL4 5000LM LP840	889804710458	2x4 LED lay-in troffer	5062	4000K	120-277	38.79	28	1
2GTL4 5000LM 347 LP835	889804710489	2x4 LED lay-in troffer, 347v	4867	3500K	347	42.78	28	1
2GTL4 5000LM 347 LP840	889804710595	2x4 LED lay-in troffer, 347v	5062	4000K	347	42.78	28	1
2GTL4 5000LM E10W LP835	889804710625	2x4 LED lay-in troffer, emergency battery	4867	3500K	120-277	38.79	28	1
2GTL4 5000LM E10W LP840	889804710700	2x4 LED lay-in troffer, emergency battery	5062	4000K	120-277	38.79	28	1

Performance Data			
Lumen Package	Lumens	Input Watts	LPW
30L LP830	2923.34	23.3	125
30L LP835	2983	23.3	128
30L LP840	3102.32	23.3	133
30L LP850	3161.98	23.3	136
40L LP830	3843.56	29.83	129
40L LP835	3922	29.83	131
40L LP840	4078.88	29.83	137
40L LP850	4157.32	29.83	139
48L LP830	4681.46	35.79	131
48L LP835	4777	35.79	133
48L LP840	4968.08	35.79	139
48L LP850	5063.62	35.79	141
60L LP830	6093.64	48.82	125
60L LP835	6218	48.82	127
60L LP840	6466.72	48.82	132
60L LP850	6591.08	48.82	135
72L LP830	7203.98	53.32	135
72L LP835	7351	53.32	138
72L LP840	7645.04	53.32	143
72L LP850	7792.06	53.32	146
88L LP830	8563.24	65	132
88L LP835	8738	65	134
88L LP840	9087.52	65	140
88L LP850	9262.28	65	143
100L LP830	10449.74	82.75	126
100L LP835	10663	82.75	129
100L LP840	11089.52	82.75	134
100L LP850	11302.78	82.75	137
140L LP830	13306.44	110.25	121
140L LP835	13578	110.25	123
140L LP840	14121.12	110.25	128
140L LP850	14392.68	110.25	131

**Note:** Performance based on standard #12 pattern acrylic lens.

### How to Estimate Delivered Lumens in Emergency Mode

Use the formula below to estimate the delivered lumens in emergency mode

$$\text{Delivered Lumens} = 1.25 \times P \times LPW$$

P = Output power of emergency driver. P = 10W for E10WLCP option.

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet. LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

### BSE Labeling Options

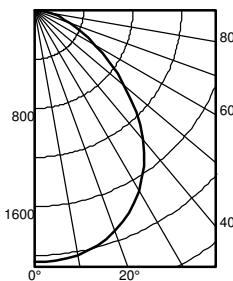
**BSE10** Drivers load transfer relay installed per manufacturer's instructions. Voltage, BGTD and BSE10 called out.

**BSE14** One voltage fixture with driver load control relay supplied with one prewire (PWS option). Prewire wired for normal circuit, the control relay for emergency circuit left unconnected. Voltage, BGTD, BSE14 and prewire called out, in the description.

\*For configurations with Reloc or two voltages an RFA modification is required.

## PHOTOMETRICS

**2GTL 4 48L LP835**, 4878 delivered lumens, test no. ISF 36875P10, tested in accordance to IESNA LM-79.



Ave	Lumens	Zone	Lumens	% Lamp	pf		20%			50%			Initial FC	Mounting	Height	Beam	Diameter	FC	Diameter	FC		
					pc	pw	80%	70%	50%	50%	30%	10%										
0	2057	0° - 30°	1592.7	32.6	0	119	119	119	116	116	116	111	111	111	50% beam -	10% beam -						
5	2053	195	0° - 40°	2559.5	52.5	1	105	101	98	103	99	96	99	96	93	64.5°						
15	1985	560	0° - 60°	4133.7	84.7	2	93	87	81	91	85	80	88	83	79	105.3°						
25	1823	838	0° - 90°	4878.5	100.0	3	83	75	69	81	74	68	78	72	67							
35	1552	967	90° - 120°	0.0	0.0	4	74	66	59	73	65	59	70	63	58							
45	1168	899	90° - 130°	0.0	0.0	5	66	58	52	65	57	51	63	56	51	8.0						
55	753	675	90° - 150°	0.0	0.0	6	60	52	46	59	51	45	58	50	45	6.9						
65	420	422	90° - 180°	0.0	0.0	7	55	47	41	54	46	41	53	45	40	30.9						
75	218	234	0° - 180°	4878.5	*100.0	8	50	42	37	50	42	36	48	41	36	17.1						
85	85	89	*Efficiency			9	46	38	33	46	38	33	45	38	33	19.7						
90	0					10	43	35	30	42	35	30	41	35	30	24.9						

## Constant Lumen Management

Enabled by the embedded nLight control, the GTL actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.

