

FEATURES & SPECIFICATIONS

 $\textbf{INTENDED USE} \ \, -- \ \, \text{The VT Series Volumetric LED Troffer (VTL/VTS) combines the aesthetics and high}$ performance with intelligent LED engines for applications such as offices, schools, retail locations and hospitals. High-efficacy light engines deliver long life and excellent color, ensuring a superior quality lighting installation that is highly efficient and sustainable. Multiple lumen packages and driver options provide solutions for all your lighting applications. Featured nLight control system provides design flexibility and ease of installation and optimum energy savings.

CONSTRUCTION — Rugged, one-piece cold-rolled steel coated polyester, painted after fabrication with embossed facets (VTL) or smooth (VTS) reflector surface. Impact-modified, single clear acrylic diffuser provides excellent shielding and wide distribution. End plates include integral T-bar clips. Fixture may be mounted and wired in continuous rows. Total fixture height is only 4-3/8". Driver is accessible from below the fixture, behind the diffuser and channel cover.

OPTICS — Volumetric illumination is achieved 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. Deep drawn 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. High-performance diffuser provides LED concealment, even illumination across the diffuser and improved lumen-per-watt performance.

Now available with two different aesthetics including the standard Acrylic Linear Prismatic Diffuser (ADP) and the Acrylic smooth (ADSM) diffuser. Both options are available with trim rings (ADSMT/ADPT).

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 80% LED lumen maintenance at 60,000 hours (L80/60,000).

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 them to digitally communicate with other nLight enabled controls such as dimmers, switches, nLight AIR RIO, RES7 occupancy sensors, and photocontrols. Simply connect all the nLight enabled control devices and the VTL/VTS luminaires using standard Cat-5 cabling, or the nLight AIR wireless network. Unique plug-and-play convenience allows devices and luminaires to 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.

SENSOR— Integrated sensor (individual control): Sensor Switch MSD7ADCX (Passive infrared (PIR)) or MSDPDT7ADCX (PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 2 for more details on the integrated sensor.

Integrated Sensor (nLight Wired Networking): This sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When wired, using CAT-5 cabling, with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. See page 2 for the nLight sensor options.

Integrated Smart Sensor (nLight Air Wireless Platform): The RES7 sensor is nLight AIR enabled, meaningit has the ability to communicate over the wireless nLight control platform. It is available with an automatic dimming photocell, and either a digital PIR or microphonic (PDT) dual technology occupancy sensor. It pairs to other luminaires and wall switches through our mobile app, CLAIRITY+, which allows for simple sensor adjustment. See page 3 for more details on the Integrated Smart Sensor.

INSTALLATION — Unique grid interfacing arrangement provides mounting into standard 1" and 9/16" tee bar or screw slot grids. 9/16" allows fixture trim to hang level with architectural ceiling tiles. Drywall ceiling adaptors available. Suitable for damp location.

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

GOVERNEMENT 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 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/

NOTE: Actual performance may differ as a result of end-user environment and application. A generational electronics upgrade occurred in May 2019. The upgraded VT series LED troffer has a slight visual variation from previous generations.

All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

alog mber
tes
ne e

VT Series Volumetric LED Troffer

2VTL4/2VTS4











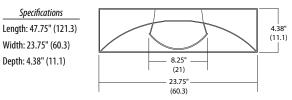






Dimensions

All dimensions are inches (centimeters) unless otherwise specified.



Embed nLight controls today. Prepare for tomorrow.



** 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® or XPoint™ Wireless control networks when ordered with drivers marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

COMMERCIAL INDOOR 2VTL4_2VTS 2X4



ORDERING INFORMATION

 $\underline{\text{Lead times will vary depending on options selected. } Consult \text{ with your sales representative.} \\$

Example: 2VTL4 40L ADPT EZ1 LP840 MSD7ADCX

2VTL4/2VTS4					
Series	Airfunction	Lumens ¹	Diffuser	Voltage	Driver
2VTL4 2X4 Ribbed Reflector 2VTS4 2X4 Smooth Reflector	(blank) Static H Heat removal	30L 3000 lumens 40L 4000 lumens 48L 4800 lumens 60L 6000 lumens 72L 7200 lumens 85L 8500 lumens 100L 10000 lumens ² 120L 12000 lumens ²	ADP Acrylic linear prismatic ADPT Acrylic linear prismatic with diffuser trim rings ADSM Acrylic Curved, smooth ADSMT Acrylic Curved, smooth with diffuser trim rings	(blank) MVOLT 347 347V ³	EZ1 eldoLED dims to 1%, 0-10V EZB eldoLED dims to 0.1%, 0-10V GZ1 Dims to 1% (0-10V dimming) ⁴ GZ10 Dims to 10% (0-10V dimming) ⁴ EDB eldoLED DALI ⁵ SLD Step-level dimming ⁵

BDP EL7L	Disconnect Plug 700 lumen battery pack, Noncompliant with CA T20
EL7L	
EL14L E10WLCP BGTD PWS1836 PWS1846 PWS1846 PWSLV PWS1856LV CP BAA	1400 lumen battery pack, Noncompliant with CA T20 EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS Bodine Generator Transfer Device ^{10,11} 6' pre-wire 3/8" diameter, 18 gauge, 1 circuit 6' pre-wire 3/8" diameter, 18 gauge, 2 circuit

Notes

- Approximate lumen output.
- Not available with SLD, EL7L and EL14L.
- Not available with SLD, EL7L, EL14L, or E10WLCP.
- GZ1, GZ10 drivers not available with any Controls or sensor options.
- Not available with N80, N80EMG, N100, or N100EMG, or NLTAIR2.
- Not available with not, NotChin, Yirod, of moching, in Kirink.

 Note: The Milling of the Milling
- Must specify ADPT diffuser. See sensor section on page 3.
- Requires N80, N80EMG, N100, or N100EMG.
- Not available with SLD.
- Must specify voltage. Requires BSE labeling, voltage specific. Consult factory for options.
- 12 See UL 924 Sequence of Operation chart on page 4. When combined with the EZ1 option, can be used as a normal power sensing device for nLight AIR devices and luminaires with EM emergency options.
- Not available with N80, N80EMG, N100, N100EMG, PWS1836, PWS1846, PWS1846 PWSLV or PWS1856LV.



2VTL/2VTS Volumetric Recessed Lighting 2'x4'

Accessories: Order as separate catalog number.

2VT4 F916 Trim to adjust fixture mounting flush with 9/16" T-bar; for 2x4 fixture

DGA24 FS/VT Drywall ceiling adapter with trim kit

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

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 SD A	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic

All the above are UL 924 Listed products that are certified for field install external/remote to the fixture.

Delivered emergency illumination of CP10 models outperforms legacy 1400 lumen fluorescent emergency ballasts.

Please contact us at techsupport@iotaengineering.com for any Emergency Battery related questions.

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

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 CIAIRity™+ 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:



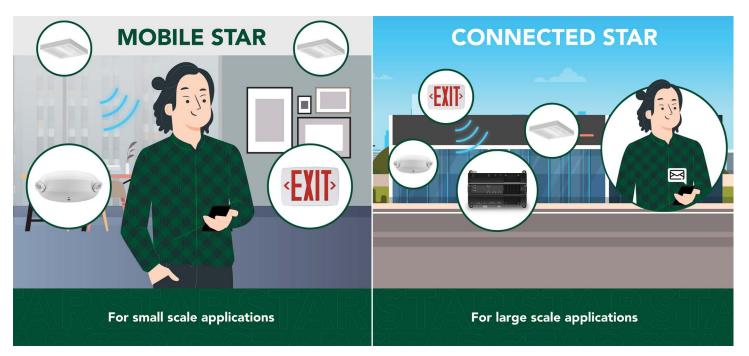
Testing for 30 seconds every 30 days



Testing for 90 minutes once a year



Record keeping and to report to the authority having local jurisdiction



nLight® Wired Control Accessories:

Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight.

WallPod stations On/Off On/Off & raise/lower Graphic touchscreen Photocell controls

Full range dimming

Model number nPODM [color] nPODM DX [color] nPOD GFX [color] Model number nCM ADCX RJB

Occupancy sensors

Small motion 360°, ceiling (PIR / dual tech) Large motion 360°, ceiling (PIR / dual tech) Wall switch with raise/lower

Cat-5 cable (plenum rated)

10' cable 30' cable

15/16

Model number

nCM 9 RJB / nCM PDT 9 RJB nCM10 RJB / nCM PDT 10 RJB nWSX PDT LV DX [color]

Model number

CATS 10FT J1 CATS 30FT J1

nLight® AIR Control Accessories:

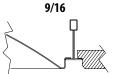
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.

Wall switches	Mod
On/Off single pole	rP00
On/Off two pole	rP00
On/Off & raise/lower single pole	rP0E
On/Off & raise/lower two pole	rP0E
On/Off & raise/lower single pole	rP0E

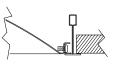
Nodel number

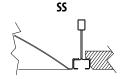
rPODB [color] G2 rPODB 2P [color] G2 rPODB DX [color] G2 rPODB 2P DX [color] G2 rPODBZ DX WHG2

Mounting data



9/16 with accessory 2VT4 F916





UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

nLight Platform

nLight embedded fixtures offer:	Customers get:
Manual Dimming	Convenience and visual comfort for occupants
Motion Sensing and/or Daylight Harvesting	Energy savings and code compliance
Fixture or Group Level Control	Ability to configure lighting to the space requirements
Flexibility	Ease of fixture moves, adds and changes
Wireless Wall Switch (nLight AIR Only)	Ease and flexibility of placement
Astronomical and Time of Day Scheduling	Energy savings and building security
Scalable Solution	nLight controls to grow with your business
Future-Ready	nLight platform to set foundation for future upgrades and capabilities

nLight Air Wireless







2VTL/2VTS 2X4 Series

Simple as 1,2,3

- 1. Install the nLight® AIR fixtures with embedded smart sensor
- 2. Install the wireless battery-powered wall switch
- 3. With CLAIRITY+ app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome

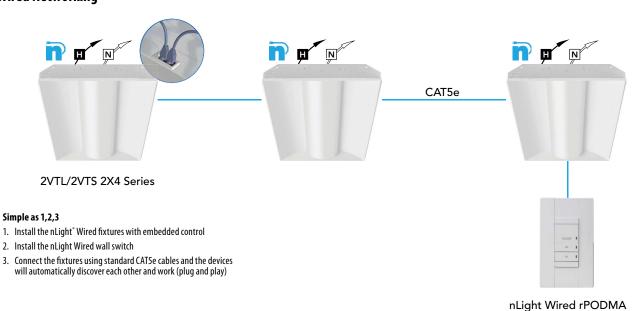




nLight AIR rPODBA

Mobile Device

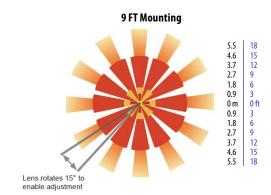
nLight Wired Networking



Sensor Options					
	Automatic Dimming Photocell	Occupancy Sensing		nLight Wired	nLight AIR
Option		PIR	PDT	Networking	Networking
MSD7ADCX	Х	Х			
MSDPDT7ADCX	Х		Х		
NES7		Х		Х	
NES7ADCX	Х	Х		Х	
NESPDT7			Х	Х	
NESPDT7ADCX	Х		Х	Х	
RES7	Х	Х			Х
RESPDT7	Х	Х	Х		Х

Sensor Coverage Pattern Mini 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and
- 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor



Integrated Sensor with Individual Control

The MSD7ADCX PIR occupancy sensor/automatic dimming photocell is ideal for areas without obstructions and where daylight harvesting may be desired. Suggested applications include, but not limited to, hallways, corridors, storage rooms, and breakrooms or other areas where people are typically moving.

The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

nLight AIR Wireless

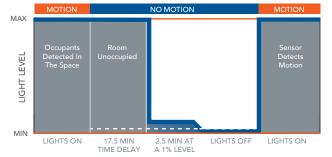
nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application.

nLight Wired Networking

The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion. Ideal areas include hallways, corridors, storage rooms, and breakrooms. Additionally, the nES7ADCX includes an integrated photocell, which enables daylight harvesting controls.

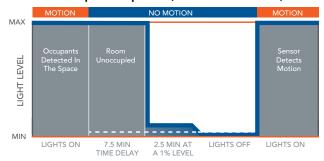
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

Sequence of Operation (MSD7 Sensor)



^{*}The presetting on the automatic dimming photocell is 5fc.

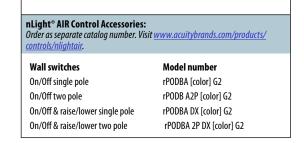
Sequence of Operation (nES7 and rES7 and Sensor)

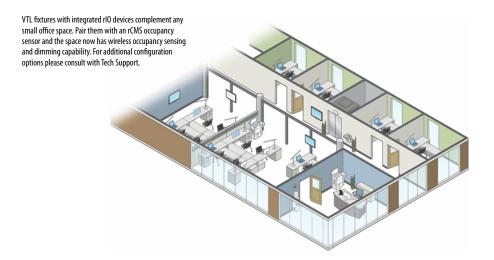


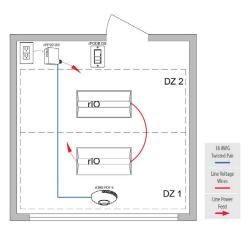
^{*}The presetting on the automatic dimming photocell is 5fc (NES7) and 10fc (RES7).

Controls Accessories

nLight® Wired Control Accessories: Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight. **WallPod stations** Model number **Occupancy sensors** Model number 0n/0ff nPODMA [Color] Small motion 360°, ceiling (PIR / dual tech) nCM 9 RJB / nCM PDT 9 RJB On/Off & raise/lower nPODMA DX [Color] Large motion 360°, ceiling (PIR / dual tech) nCM10 RJB / nCM PDT 10 RJB Graphic touchscreen nPOD TOUCH [Color] Wall switch with raise/lower nWSX PDT LV DX [color] Photocell controls Model number **Model number** Cat-5 cable (plenum rated) Full range dimming nCM ADCX RJB 10' cable CAT5 10FT J1 30' cable CAT5 30FT J1







rCMS ¹				Exa	mple: RCMS PDT 10 AR G2
Series / Detection	Power Supply ¹	Occupancy Detection	Lens (Required)	Operating Mode	Generation
RCMS nLight AIR occupancy and daylight sensor	[blank] Power Supply ordered separately PS 150 Standard 150 mA Power Supply	[blank] PIR Detection PDT Dual Tech PIR/ Microphonics	 Large Motion/ Extended Range 360° Small Motion/ Extended Range 360° High Bay 360° Lens 	[BLANK] None AR Auxiliary Relay	G2 Generation 2 compatibility

Notes

RCMS requires low voltage power from either RPP20 DS 24V G2 or PS150.







nLight WIRED NPOD UNITOUCH



nLight WIRED nPODMA DX



nLight AIR rPODBA











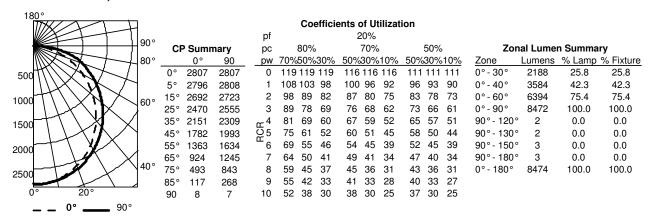


rPODBA RCMS

2VTL/2VTS Volumetric Recessed Lighting 2'x4'

PHOTOMETRICS

2VTL4 85L ADP LP835, 8475 delivered lumens.



2VTL/2VTS Volumetric Recessed Lighting 2'x4'

Performance Data					
Lumen Package	Lumens	Input Watts ²	LPW		
30L ADP LP830	3224	23.2	139		
30L ADP LP835	3280	23.2	141		
30L ADP LP840	3335	23.2	144		
30L ADP LP850	3335	23.2	144		
30L ADP LP930	2668	23.2	115		
30L ADP LP935	2780	23.2	120		
30L ADP LP940	2835	23.2	122		
30L ADP LP950	2835	23.2	122		
40L ADD L P830	4138	31.4	132		
40L ADD LP835	4210 4281	31.4	134 137		
40L ADP LP840 40L ADP LP850	4281	31.4 31.4	137		
40L ADP LP930	3425	31.4	109		
40L ADP LP935	3568	31.4	114		
40L ADP LP940	3639	31.4	116		
40L ADP LP950	3639	31.4	116		
48L ADP LP830	5149	38.4	134		
48L ADP LP835	5238	38.4	136		
48L ADP LP840	5326	38.4	139		
48L ADP LP850	5326	38.4	139		
48L ADP LP930	4261	38.4	111		
48L ADP LP935	4439	38.4	116		
48L ADP LP940	4528	38.4	118		
48L ADP LP950	4528	38.4	118		
60L ADP LP830	6194	47.7	130		
60L ADP LP835	6301	47.7	132		
60L ADP LP840	6407	47.7	134		
60L ADP LP850	6407	47.7	134		
60L ADP LP930	5126	47.7	107		
60L ADP LP935	5340	47.7	112		
60L ADP LP940 60L ADP LP950	5446 5446	47.7 47.7	114 114		
72L ADP LP830	7316	59.0	124		
72L ADP LP835	7442	59.0	126		
72L ADP LP840	7568	59.0	128		
72L ADP LP850	7568	59.0	128		
72L ADP LP930	6055	59.0	103		
72L ADP LP935	6307	59.0	107		
72L ADP LP940	6433	59.0	109		
72L ADP LP950	6433	59.0	109		
85L ADP LP830	8331	67.7	123		
85L ADP LP835	8475	67.7	125		
85L ADP LP840	8618	67.7	127		
85L ADP LP850	8618	67.7	127		
85L ADP LP930	6895	67.7	102		
85L ADP LP935	7182	67.7	106		
85L ADP LP940	7326	67.7	108		
85L ADP LP950 100L ADP LP830	7326	67.7 82.2	108		
100L ADP LP835	10153 10328	82.2	123 126		
100L ADP LP840	10528	82.2	128		
100L ADP LP850	10503	82.2	128		
100L ADP LP930	8402	82.2	102		
100L ADP LP935	8752	82.2	106		
100L ADP LP940	8928	82.2	109		
100L ADP LP950	8928	82.2	109		
120L ADP LP830	12543	98.1	128		
120L ADP LP835	12760	98.1	130		
120L ADP LP840	12976	98.1	132		
120L ADP LP850	12976	98.1	132		
120L ADP LP930	10381	98.1	106		
120L ADP LP935	10813	98.1	110		
120L ADP LP940	11029	98.1	112		

How to Estimate Delivered Lumens in Emergency Mode

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

Delivered Lumens = 1.25 x P x LPW

P= Ouput 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.

Note: Based on ADP diffuser