LITHONIA LIGHTING®

Catalog Number
Notes
Type

BLTR Relight Series

2BLT2R

2' x 2' Relight
LED

FEATURES & SPECIFICATIONS

INTENDED USE — The BLTR Best-Value Low Profile LED Relight Assembly is a cost effective solution for renovating existing fluorescent troffer and parabolic fixtures while providing upgraded aesthetics and outstanding performance. The BLTR's popular center basket design offers a clean, versatile style, and volumetric distribution. The wide range of lumen packages and control and driver options make the BLTR a great choice for many applications including offices, schools, hospitals, retail spaces and other general lighting applications. Certain airborne contaminants can diminish integrity of acrylic. **Click here for Acrylic Environmental Compatibility table for suitable uses**.

CONSTRUCTION — Universal end brackets are constructed of 22-gauge powder-painted steel and are secured to the host fixture with provided TEKS™ screws. The driver and light engine assembly is integrated in the BTLR door assembly making this an extremely simple, time saving, relight solution. The door frame and reflector assembly is made of cold-rolled steel and is painted after fabrication with a matte white powder paint for improved aesthetics and increased light diffusion. Diffusers are extruded from impact modified acrylic for increased durability. Diffuser trim rings provide an attractive mounting for integral sensors as well as adding a decorative element to the luminaire aesthetics.

LED boards and driver are accessible from below.

OPTICS — Volumetric illumination is achieved by creating an optimal mix of light to walls, partitions and vertical and horizontal work surfaces – rendering the interior space, objects and occupants in a more balanced, complimentary luminous environment. High performance extruded acrylic diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Four diffuser choices available - curved and square designs with linear prisms or a smooth frosted finish.

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). Color Variation within 3-step MacAdam ellipse (3SDCM).

Non-Configurable BLTR Relight: Generic 0-10 volt dimming driver. Dims to 10%

Configurable BLTR Relight: available in High Efficiency (HE) versions for applications where a lower wattage (over the standard product) is required. High Efficiency versions deliver >130 LPW and can be specified via the Lumen Package designations in the Ordering Information below.

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

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

Optional integrated nLight®controls make each luminaire addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, nLight AIR RIO, RES7 occupancy sensors, and photo contols. Simply connect all the nLight enabled control devices and the BLTR Relight assembly 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 on board 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. Driver disconnect provided where required to comply with US and Canadian codes.

SENSOR— Integrated sensor (individual control): SensorSwitch 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 5 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 6 for the nLight sensor options.

Integrated Smart Sensor (nLight Air Wireless Platform): The rES7 sensor is nLight AIR enabled, meaning it 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 microphonics (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 6 for more details on the Integrated Smart Sensor.

Integrated Wireless Sensor (single room control): SensorSwitch VERTEX JOT or JOTVTX15 luminaire-embedded occupancy and ambient light sensor allows the luminaire to power off when the space is unoccupied or when enough ambient light is entering the space. See page 4 for more details on the integrated wireless sensor.

INSTALLATION — After existing fluorescent components are removed from the host housing, universal end brackets are secured in place with TEKS™ screws. The BLTR's integrated driver and light engine door assembly can then be hinged to the universal end brackets and will hang in place for completion of assembly plug-in wiring. Rotate the doorframe assembly closed and pivot the cam latches to secure the doorframe in place. Suitable for damp location installations. Damp location not available with sensor versions.

LISTINGS — UL/cUL Listed for use in fluorescent light fixtures. Installing Relight assemblies per instructions will not impact existing fixture UL listing. Tested to LM80 standards.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at 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 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

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.

eldoLED

Specifications

Length: 23.9 (60.7)

Width: 23.9 (60.7)

Depth: 2.75 (6.9)

Weight: 10 (25.4)

All dimensions are inches (centimeters) unless otherwise specified.

Embed nLight controls today. Prepare for tomorrow.

Now	**Tomorrow**
User-friendly install	Scalability
Enhanced energy savings	Space configuration
Code compliance	Future-ready

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.

*See ordering tree for details.

2BLT2R Volumetric Recessed Lighting 2'x2' Relight

A+ Capable options indicated by this color background.

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

Example: 2BLT2R 33L ADP EZ1 LP835

2BLT2R

Series	Trim Type/ Air Function	Lumens²		Diffuser	Voltage	Driver	Color temperature
2BLT2R 2X2 BLTR	(blank) Standard white two-piece flanged bracket A Standard two-piece flanged bracket painted black to match parabolic / air-handling reveals F Flangeless two-piece bracket for installation in drywall / "hard lid" ceilings LPB One-piece low profile bracket for installation in some obstructed housings (consult factory) (see pg. 4)	**Standard efficiency (>125 LPW)** 20L 2000 33L 3300 40L 4000	**High efficiency³ (>130 LPW)** 20LHE 2000 33LHE 3300 40LHE 4000 48LHE 4800	ADP Curved, linear prisms ADSM Curved, smooth SDP Square, linear prisms SDSM Square, smooth **Diffusers w/ trim rings** ADPT Curved, linear prisms ADSMT Curved, smooth SDPT Square, linear prisms SDSMT Square, smooth	(blank) MVOLT 120 120V 277 277V 347 347V⁴,⁵	EZ1 eldoLED dims to 1% (0-10 volt dimming) GZ1 Dims to 1% (0-10V dimming)⁶ GZ10 Dims to 10% (0-10V dimming)⁶ SLD Step-level dimming⁷	LP830 82CRI, 3000 K LP835 82CRI, 3500 K LP840 82CRI, 4000 K LP850 82CRI, 5000 K LP930 90CRI, 3000K LP935 90CRI, 3500K LP940 90CRI, 4000K LP950 90CRI, 5000K

nLight Interface	Control¹⁰		Standby Mode	Options
nLight Wired (blank) no nLight® interface N80 nLight with 80% lumen management N80EMG nLight with 80% lumen management. For use with generator supply EM power⁸ N100 nLight without lumen management N100EMG nLight without lumen management. For use with generator supply EM power⁸ **nLight Wireless** (blank) no nLight® interface NLTAIR2 nLight AIR Generation 2 enabled⁹	**nLight Wired** (blank) No sensor control NES7 nLight™ nES 7 PIR integral occupancy sensor¹¹ NESPDT7 nLight™ nES PDT 7 dual technology integral occupancy control¹¹ NES7ADCX nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell¹¹ NESPDT7ADCX nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell¹¹ **nLight Wireless** RES7 nLight AIR control with PIR integral occupancy sensor and automatic dimming photocell¹⁷ RES7PDT nLight AIR control with PDT dual technology integral occupancy sensor and automatic dimming photocell¹⁷ RIO nLight AIR radio module without sensor¹⁷ RES7EM nLight AIR PIR integral occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection¹⁷ RES7PDTEM nLight AIR microphonics dual technology occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection¹⁷ RIOEM nLight AIR radio module less sensor, with UL924 Emergency Operation, via power interrupt detection¹⁷	**Individual Control** MSD7ADCX PIR integral occupancy sensor with automatic dimming control photocell¹² MSDPDT7ADCX PDT integral occupancy sensor with automatic dimming control photocell¹² JOT Wireless room control with "Just One Touch" pairing¹⁸ JOTVTX15 Wireless occupancy sensor with "Just One Touch" pairing¹⁸	NOC Occupancy sensor disabled¹³	BDP Disconnect Plug EL7L 700 lumen battery pack EL14L 1400 lumen battery pack E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS BGTD Bodine Generator Transfer Device¹⁴ GLR Fast-blowing fuse¹⁵ GMF Slow-blowing fuse¹⁵ NPLT Narrow pallet FAO Field adjustable output¹⁶ BAA Buy America(n) Act and/or Build America Buy America Qualified JP40 Job Pack

Notes

1 Consult factory for airflow data.
2 Approximate lumen output.
3 All versions may not achieve 130+ LPW. Refer to photometry on www.acuitybrands.com.
4 Not available with EL7L or EL14L battery packs.
5 347 not available with SLD
6 GZ1, GZ10 not available with any Control or Sensor options.
7 Not available with N80, N80EMG, N100, N100EMG, NLTAIR2, or occupancy control.
8 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
9 Must order with RES7, RES7PDT, or RIO sensor. Only available with EZ1 driver.
10 Must specify diffuser with trim rings. See sensor options on page 4.
11 Requires N80, N80EMG, N100, or N100EMG.

12 Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate. Not available with Controls options.
13 Can only be ordered in conjunction with EZ1, NLTAIR2, RES7/RES7PDT. Occupancy sensor disabled at factory but can be re-enabled upon commissioning.
14 Requires BSE labeling. Consult factory for options.
15 Must specify voltage, 120 or 277 with GLR & GMF fusing.
16 Consult factory.
17 See UL924 Sequence of Operation instruction on page 3. 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.
18 Wired 0-10v dimming control not available. Not available with nLight Interface or Controls options. Not available with SLD, NOC, BGTD, or FAO. Must specify diffuser with trim rings.

2BLT2R Volumetric Recessed Lighting 2'x2' Relight

Multiple Diffuser Options

ADP Curved Ribbed
ADSM Curved Smooth
SDP Square Ribbed
SDSM Square Smooth

Non-Configurable BLTR

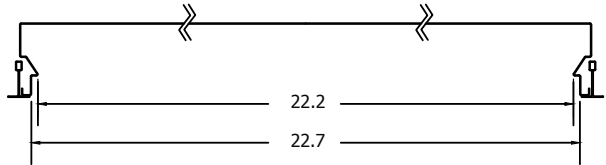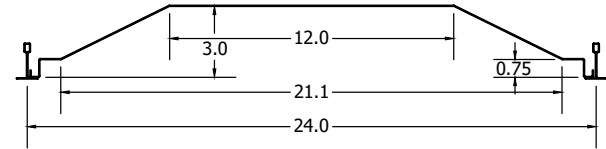| Non-Configurable BLTR								
Stock	**Catalog Description***	**UPC**	**Lumens**	**Wattage**	**LPW**	**Color Temperature**	**Voltage**	**Pallet Qty**
Stock	2BLT2R 33L ADP LP835	190887550900	3313	27	124	3500K/80 CRI	120-277	52
	2BLT2R 33L ADP LP840	190887550931	3404	27	127	4000K/80 CRI	120-277	52

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 CL**AIR**ITY+ 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.

Accessories & Replacement Parts

Replacement Parts: *Order as separate catalog number.*	
DBLTR24 ADP LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 SDP LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 ADSM LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 SDSM LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 ADPT LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 SDPT LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 ADSMT LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 SDSMT LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 ADPT SENSOR LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 SDPT SENSOR LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 ADSMT SENSOR LENS ASSEMBLY	2 ft. replacement lens (trims included)
DBLTR24 SDSMT SENSOR LENS ASSEMBLY	2 ft. replacement lens (trims included)
U10528B	2 ft. replacement troffer trim strip
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

Fit & Compatibility

The 2BLT2R Relight Assembly was designed to upgrade recessed 2x2 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.

3.0 12.0 0.75
21.1
24.0

22.2
22.7

SIDE SECTION

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	
ILBLP CP10 HE SD A	10W	90	1200	Title 20, Self Diagnostic
ILB CP10 HE AELR A	10W	90	1200	Title 20; Enabled with Self Testing, Automated Reporting (STAR)
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 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 for any Emergency Battery related questions.

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 Cl**AIR**ity™**+** 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

MOBILE STAR

For small scale applications

CONNECTED STAR

For large scale applications

Application Guide

2BLT2R — Typically used for lensed troffer installations. Assembly contains white end brackets and is supplied with white trim strips for use in closing gaps down fixture sides (installer's choice - not required).

Note: This kit will fit in Lithonia's Avante non-air fixture.

2BLT2R A — Typically used for parabolic installations with black reveal. Assembly contains black end brackets to match black reveal around host housing. Does not interfere with host housing air supply/return if present (along fixture sides).

BLTR Bracket "fit" recommendations

Ceiling type	15/16" T-grid	9/16" T-grid	Narrow Screw-slot	Hard Ceiling w/ "Lay-In" style plaster frame (drywall grid adapter)	Hard Ceiling with Integral drywall mounting ('swing gate' housing)	1x1 hard tile ceiling	Deep louver riser ("renovator" parabolic)
Recommended BLTR bracket type	**Standard**	**Standard**	**F bracket ***	**Standard**	**F bracket**	**F bracket**	**LPB bracket**

* Standard bracket may work in some

BLTR "F" bracket vs. standard

Because the "F" bracket does not have the standard T-grid return flange, it can be used in many hard ceiling / drywall frame installations where the standard bracket would be obstructed.

This "F" bracket can also often be used in narrow screw-slot grid ceilings.

Replacement / Trial parts

To order BLTR Standard 2pc end bracket replacement (shipped as assembled units):
- 2x4 =   CI code *257YX0   T5746 (qty 2 required per kit)
- 2x2 =   CI code *257YX0   T5746 (qty 2 required per kit)
- 1x4 =   CI code *259VRM   T5745 (qty 2 required per kit)

To order BLTR "F" 2pc end bracket replacement (shipped as assembled pairs):
- 2x4 =   CI code *254PVS   2BLTRF FLANGE BRKT ASSEMBLY (qty 1 req. per kit)
- 2x2 =   CI code *254PVS   2BLTRF FLANGE BRKT ASSEMBLY (qty 1 req. per kit)
- 1x4 =   CI code *255SWN   BLTRF FLANGE BRKT ASSEMBLY (qty 1 req. per kit)

Standard BLTR bracket with T-grid flange

BLTR "F" bracket without return flange

Differences between standard BLTR 2pc bracket and LPB 1-piece low profile bracket

Current 2-piece bracket has upper "T" bracket that mounts in most troffer endplates and bridges over most obstructions

1-piece design was originally developed for large customer to fit some older troffers where standard bracket would not fit due to endplate obstructions
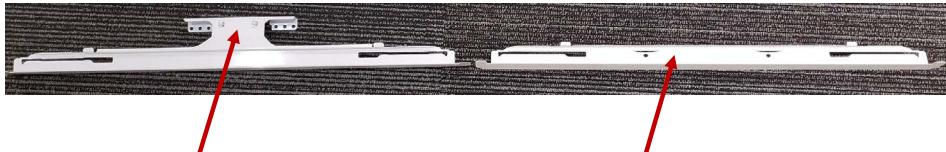
To order BLTR Standard 2pc end bracket replacement (shipped as assembled units):
- 2x4 =   CI code *257YX0   T5746 (qty 2 required per kit)
- 2x2 =   CI code *257YX0   T5746 (qty 2 required per kit)
- 1x4 =   CI code *259VRM   T5745 (qty 2 required per kit)

To order BLTR low profile 1pc LPB bracket (shipped as assembled units):
- 2x4 =   CI code *268PJK   GPF N320810 (qty 2 required per kit)
- 2x2 =   CI code *268PJK   GPF N320810 (qty 2 required per kit)
- 1x4 =   CI code n/a   *not available*

JOT Wireless

Just One Touch

SensorSwitch JOT Enabled Wireless Solution
Designed with contractors in mind, the SensorSwitch JOT enabled wireless solution offers a straightforward approach to the installation and pairing of lighting fixtures and controls. Absolutely no 0-10V control wires and no mobile apps are needed with JOT enabled products, allowing for lightning speed installation right out of the box.

1. Power: Install JOT enabled fixtures and controls as instructed.
2. Pair: Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
3. Play: Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.

BLTR Series

SensorSwitch
WSXA JOT

BLTR Series
with integrated
JOT OCC
Sensors

SensorSwitch
SPODMRA JOT

LITHONIA LIGHTING

COMMERCIAL INDOOR: One Lithonia Way Conyers, GA 30012   Phone: 800-705-SERV (7378)   www.lithonia.com

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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

BLTR Series
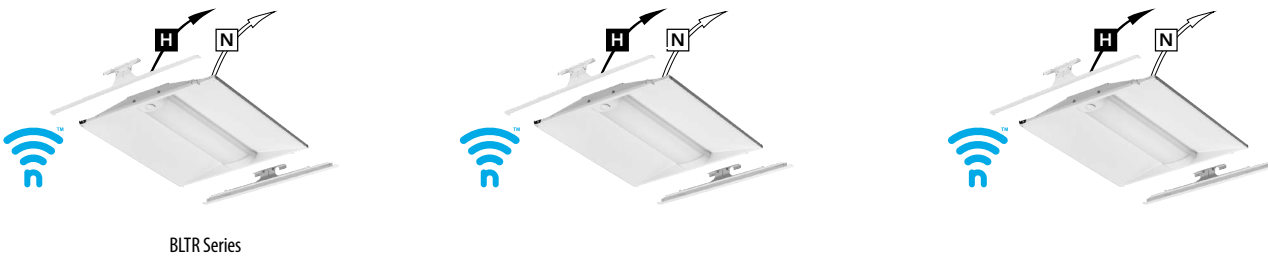
Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CLAIRITY app, pa ir 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
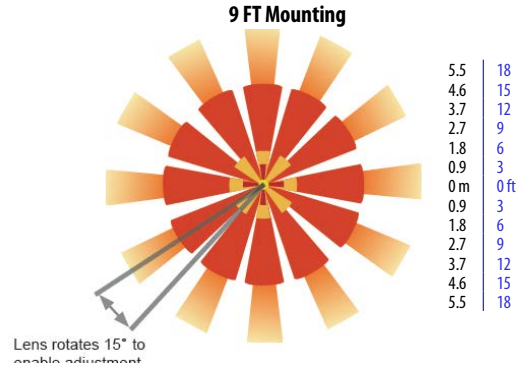

BLTR Series

CAT5e

Simple as 1,2,3

1. Install the nLight® Wired fixtures with embedded control
2. Install the nLight Wired wall switch
3. Connect the fixtures using standard CAT5e cables and the devices will automatically discover each other and work (plug and play)

nLight Wired nPODMA

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

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

9 FT Mounting

5.5	18
4.6	15
3.7	12
2.7	9
1.8	6
0.9	3
0 m	0 ft
0.9	3
1.8	6
2.7	9
3.7	12
4.6	15
5.5	18

Lens rotates 15° to enable adjustment

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 ES7PDT 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)
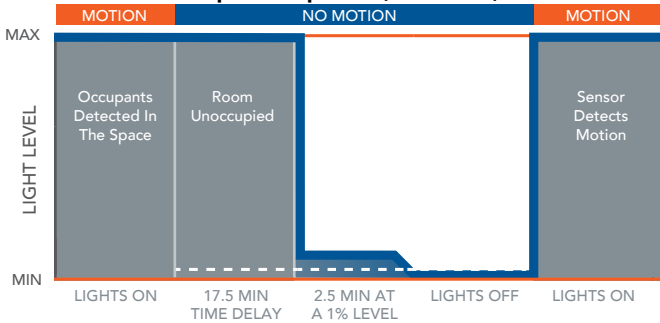
*The presetting on the automatic dimming photocell is 5fc.

Sequence of Operation (nES7 and rES7 and Sensor)
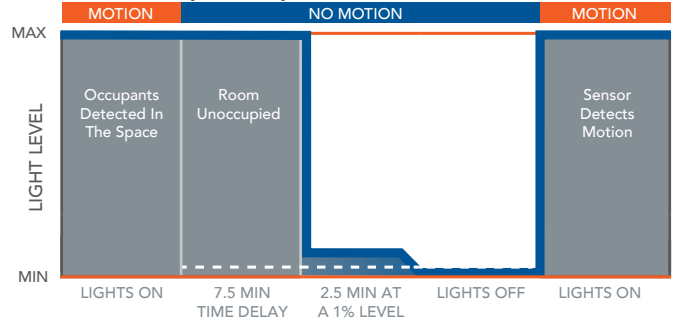
*The presetting on the automatic dimming photocell is 5fc (NES7) and 10fc (RES7).

Controls Accessories

nLight® Wired Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/nlight.

WallPod stations	Model number	Occupancy sensors	Model number
On/Off	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	Cat-5 cable (plenum rated)	Model number
Full range dimming	nCM ADCX RJB	10' cable	CAT5 10FT J1
		30' cable	CAT5 30FT J1

nLight® AIR Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.

Wall switches	Model number
On/Off single pole	rPODBA [color] G2
On/Off two pole	rPODB A2P [color] G2
On/Off & raise/lower single pole	rPODBA DX [color] G2
On/Off & raise/lower two pole	rPODBA 2P DX [color] G2

BLTR fixtures with integrated rIO devices complement any small office space. Pair them with an rCMS occupancy sensor and the space now has wireless occupancy sensing and dimming capability. For additional configuration options please consult with Tech Support.
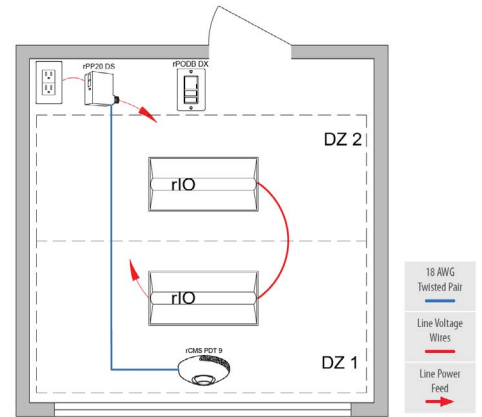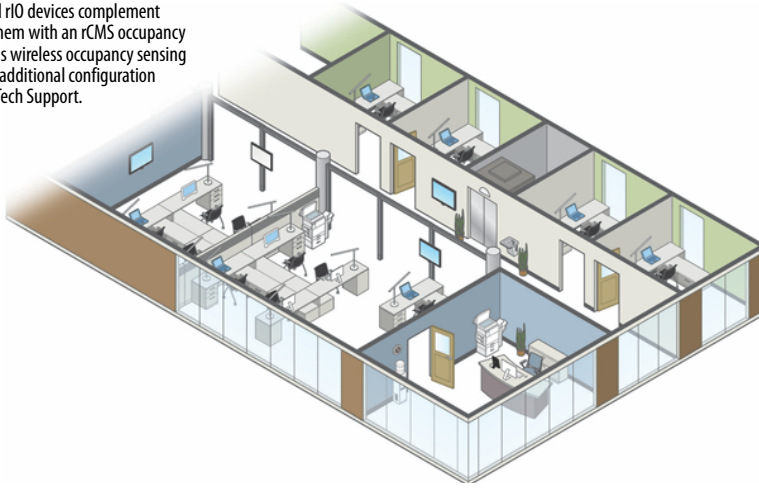
rCMS[1]					Example: RCMS PDT 10 AR G2
Series / Detection	**Power Supply[1]**	**Occupancy Detection**	**Lens (Required)**	**Operating Mode**	**Generation**
RCMS — nLight AIR occupancy and daylight sensor	[blank] — Power Supply ordered separately PS 150 — Standard 150 mA Power Supply	[blank] — PIR Detection PDT — Dual Tech PIR/Microphonics	10 — Large Motion/ Extended Range 360° 9 — Small Motion/ Extended Range 360° 6 — High Bay 360° Lens	[BLANK] — None AR — Auxiliary Relay	G2 — Generation 2 compatibility

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

SensorSwitch WSX

nLight WIRED NPOD UNITOUCH

nLight WIRED nPODMA DX

nLight AIR rPODBA

BLTR with rIO

rPODBA

RCMS

Constant Lumen Management

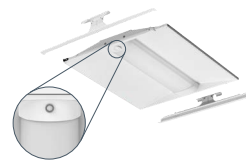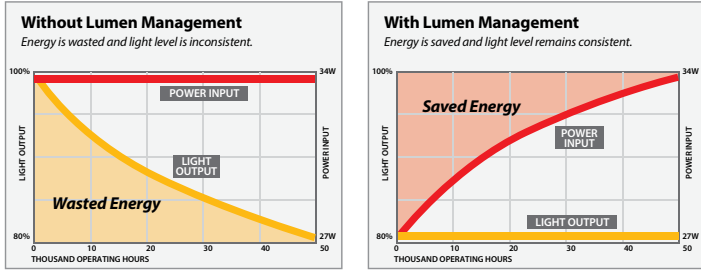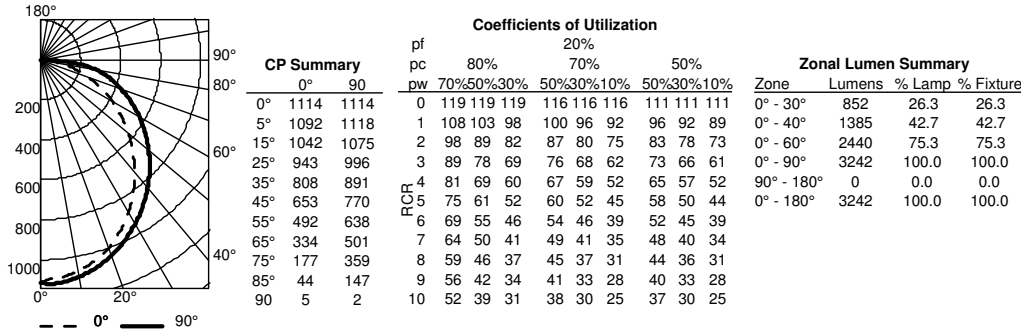Enabled by the embedded nLight control, the BLT actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.
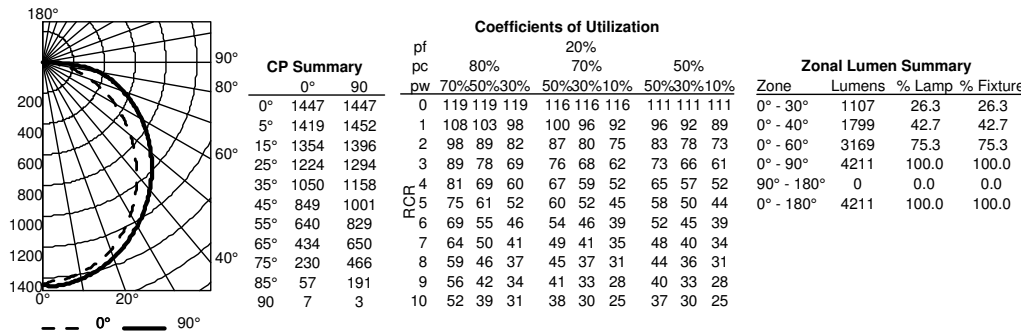
Without Lumen Management
Energy is wasted and light level is inconsistent.

With Lumen Management
Energy is saved and light level remains consistent.

PHOTOMETRICS

2BLT2R 33L ADP LP835, 3241 delivered lumens

CP Summary

	0°	90
0°	1114	1114
5°	1092	1118
15°	1042	1075
25°	943	996
35°	808	891
45°	653	770
55°	492	638
65°	334	501
75°	177	359
85°	44	147
90	5	2

Coefficients of Utilization

	pf	20%								
	pc	80%			70%			50%		
RCR / pw	0	70%	50%	30%	50%	30%	10%	50%	30%	10%
0		119	119	119	116	116	116	111	111	111
1		108	103	98	100	96	92	96	92	89
2		98	89	82	87	80	75	83	78	73
3		89	78	69	76	68	62	73	66	61
4		81	69	60	67	59	52	65	57	52
5		75	61	52	60	52	45	58	50	44
6		69	55	46	54	46	39	52	45	39
7		64	50	41	49	41	35	48	40	34
8		59	46	37	45	37	31	44	36	31
9		56	42	34	41	33	28	40	33	28
10		52	39	31	38	30	25	37	30	25

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	852	26.3	26.3
0° - 40°	1385	42.7	42.7
0° - 60°	2440	75.3	75.3
0° - 90°	3242	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3242	100.0	100.0

2BLT2R 40L ADP LP835, 4210 delivered lumens

CP Summary

	0°	90
0°	1447	1447
5°	1419	1452
15°	1354	1396
25°	1224	1294
35°	1050	1158
45°	849	1001
55°	640	829
65°	434	650
75°	230	466
85°	57	191
90	7	3

Coefficients of Utilization

	pf	20%								
	pc	80%			70%			50%		
RCR / pw	0	70%	50%	30%	50%	30%	10%	50%	30%	10%
0		119	119	119	116	116	116	111	111	111
1		108	103	98	100	96	92	96	92	89
2		98	89	82	87	80	75	83	78	73
3		89	78	69	76	68	62	73	66	61
4		81	69	60	67	59	52	65	57	52
5		75	61	52	60	52	45	58	50	44
6		69	55	46	54	46	39	52	45	39
7		64	50	41	49	41	35	48	40	34
8		59	46	37	45	37	31	44	36	31
9		56	42	34	41	33	28	40	33	28
10		52	39	31	38	30	25	37	30	25

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1107	26.3	26.3
0° - 40°	1799	42.7	42.7
0° - 60°	3169	75.3	75.3
0° - 90°	4211	100.0	100.0
0° - 180°	0	0.0	0.0
0° - 180°	4211	100.0	100.0

FAO SETTINGS (Field Adjustable Output)

	0-10 Voltage Dimmer	% Lumen Output (approximate)	% Wattage (approximate)
Step 8	Full Output	100%	100%
Step 7	9.0 VDC	98%	100%
Step 6	8.0 VDC	88%	86%
Step 5	7.0 VDC	86%	82%
Step 4	6.0 VDC	82%	80%
Step 3	5.0 VDC	76%	75%
Step 2	4.0 VDC	71%	72%
Step 1	3.0 VDC	67%	71%
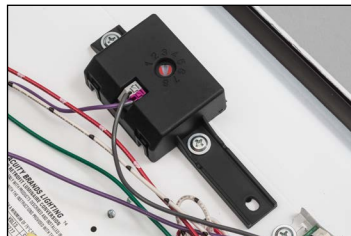
Simple adjustment of output through the use of a flat head screwdriver.

Performance Data			
Lumen Package	Lumens	Input Watts	LPW
20L ADP LP830	1981	16	127
20L ADP LP835	2051	16	132
20L ADP LP840	2084	16	134
20L ADP LP850	2143	16	138
33L ADP LP830	3237	26	125
33L ADP LP835	3351	26	130
33L ADP LP840	3404	26	132
33L ADP LP850	3502	26	135
40L ADP LP830	3900	31	125
40L ADP LP835	4038	31	130
40L ADP LP840	4102	31	132
40L ADP LP850	4220	31	136

HE Performance Data			
Lumen Package	Lumens	Input Watts	LPW
20LHE ADP LP830	2008	16	129
20LHE ADP LP835	2079	16	134
20LHE ADP LP840	2112	16	136
20LHE ADP LP850	2173	16	140
33LHE ADP LP830	3068	24	128
33LHE ADP LP835	3176	24	133
33LHE ADP LP840	3227	24	135
33LHE ADP LP850	3319	24	139
40LHE ADP LP830	3797	29	129
40LHE ADP LP835	3931	29	133
40LHE ADP LP840	3994	29	135
40LHE ADP LP850	4108	29	139
48LHE ADP LP830	4532	36	126
48LHE ADP LP835	4692	36	130
48LHE ADP LP840	4767	36	132
48LHE ADP LP850	4903	36	136