LITHONIA LIGHTING®

Catalog Number
Notes
Type

BLTR Relight Series

2BLT4R

2' x 4' 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 a made of cold-rolled steel and is painted after fabrication with a matte white powder paint for improved aesthetics and increased light diffusion. 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 controls. 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.

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.
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 ℃.
Specifications subject to change without notice.

Specifications

Length: 47.8 (121.4)

Width: 23.9 (60.7)

Depth: 2.75 (6.9)

Weight: 16.25 (41.2)

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

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.

*See ordering tree for details.

A+ Capable options indicated by this color background.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. **Example:** 2BLT4R 40L ADP EZ1 LP840

2BLT4R

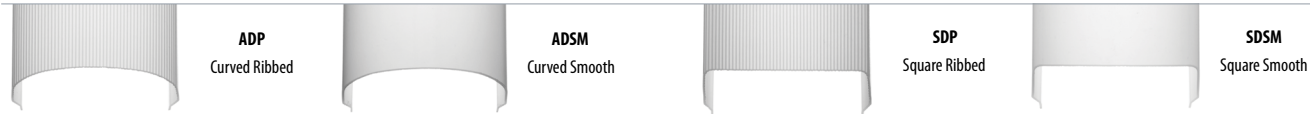| Series	Trim Type/ Air Function	Lumens[2]		Diffuser	Voltage	Driver	Color temperature
2BLT4R 2X4 BLTR	(blank) Standard white two-piece flanged bracket	**Standard efficiency (>125 LPW)**	**High efficiency[3] (>130 LPW)**	ADP Curved, linear prisms	(blank) MVOLT	EZ1 eldoLED dims to 1% (0-10 volt dimming)	LP830 82CRI, 3000 K
	A Standard two-piece flanged bracket painted black to match parabolic / air-handling reveals	30L 3000	30LHE 3000	ADSM Curved, smooth	120 120V		LP835 82CRI, 3500 K
		40L 4000	40LHE 4000	SDP Square, linear prisms	277 277V	GZ1 Dims to 1% (0-10V dimming)[6]	LP840 82CRI, 4000 K
		48L 4800	48LHE 4800	SDSM Square, smooth	347 347V[4,5]		LP850 82CRI, 5000 K
	F Flangeless two-piece bracket for installation in drywall / "hard lid" ceilings	60L 6000	60LHE 6000	**Diffusers w/ trim rings**		GZ10 Dims to 10% (0-10V dimming)[6]	LP930 90CRI, 3000K
		72L 7200	72LHE 7200	ADPT Curved, linear prisms			LP935 90CRI, 3500K
			85LHE 8500	ADSMT Curved, smooth		SLD Step-level dimming[7]	LP940 90CRI, 4000K
	LPB One-piece low profile bracket for installation in some obstructed housings (consult factory) (see pg. 4)			SDPT Square, linear prisms			LP950 90CRI, 5000K
				SDSMT Square, smooth			

nLight Interface	Control[9]		Standby Mode	Options
nLight Wired	**nLight Wired**	**Individual Control**	NOC Occupancy sensor disabled[13]	BDP Disconnect Plug
(blank) no nLight® interface	(blank) No sensor control	MSD7ADCX PIR integral occupancy sensor with automatic dimming control photocell[12]		EL7L 700 lumen battery pack (Noncompliant with CA T20)[16]
N80 nLight with 80% lumen management	NES7 nLight™ nES 7 PIR integral occupancy sensor[11]			
N80EMG nLight with 80% lumen management. For use with generator supply EM power[8]	NESPDT7 nLight™ nES PDT 7 dual technology integral occupancy control[11]	MSDPDT7ADCX PDT integral occupancy sensor with automatic dimming control photocell[12]		EL14L 1400 lumen battery pack (Noncompliant with CA T20)[16]
N100 nLight without lumen management	NES7ADCX nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell[11]			E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, (Certified in CA Title 20 MAEDBS)[15]
N100EMG nLight without lumen management. For use with generator supply EM power[8]	NESPDT7ADCX nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell[11]	JOT Wireless room control with "Just One Touch" pairing[19]		
	nLight Wireless			BGTD Bodine Generator Transfer Device[14]
nLight Wireless	RES7 nLight AIR control with PIR integral occupancy sensor and automatic dimming photocell[18]	JOTVTX15 Wireless occupancy sensor with "Just One Touch" pairing[19]		GLR Fast-blowing fuse[15]
(blank) no nLight® interface				GMF Slow-blowing fuse[15]
NLTAIR2 nLight AIR Generation 2 enabled[9]	RES7PDT nLight AIR control with PDT dual technology integral occupancy sensor and automatic dimming photocell[18]			NPLT Narrow pallet
	RIO nLight AIR radio module without sensor[18]			FAO Field adjustable output[17]
	RES7EM nLight AIR PIR integral occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection[18]			BAA Buy America(n) Act Compliant
	RES7PDTEM nLight AIR microphonics dual technology occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection[18]			JP20 Job Pack
	RIOEM nLight AIR radio module less sensor, with UL924 Emergency Operation, via power interrupt detection[18]			

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. Not available with 72L, 72LHE, or 85LHE options.
10 Must specify diffuser with trims 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 GZ1 and GZ10 driver not available with battery pack when specifying 72LHE or 85LHE lumen options. Must use EZ1 driver.
17 Consult factory.
18 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.
19 Wired 0-10v dimming control not available. Not available with nLight Interface or Controls options. Not available with NOC, SLD, BGTD, or FAO. Must specify diffuser with trim rings.

LITHONIA LIGHTING®

Multiple Diffuser Options

ADP
Curved Ribbed

ADSM
Curved Smooth

SDP
Square Ribbed

SDSM
Square Smooth

Non-Configurable BLTR

Stock	Catalog Description*	UPC	Lumens	Wattage	LPW	Color Temperature	Voltage	Pallet Qty
Stock	2BLT4R 40L ADP LP835	190887550948	3960	32	124	3500K/80 CRI	120-277	26
	2BLT4R 40L ADP LP840	190887550979	4023	32	127	4000K/80 CRI	120-277	26
	2BLT4R 46L ADP LP835	190887550993	4520	38	118	3500K/82 CRI	120-277	26
	2BLT4R 46L ADP LP840	190887551006	4620	38	121	4000K/82 CRI	120-277	26

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.*

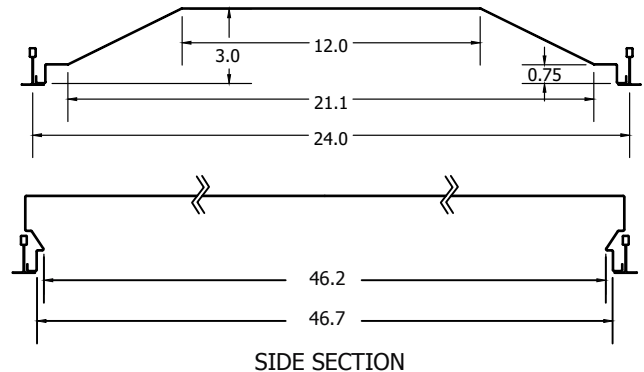|	
2DBLTR48 ADP LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 SDP LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 ADSM LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 SDSM LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 ADPT LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 SDPT LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 ADSMT LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 SDSMT LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 ADPT SENSOR LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 SDPT SENSOR LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 ADSMT SENSOR LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
2DBLTR48 SDSMT SENSOR LENS ASSEMBLY	2x4 ft. replacement lens (trims included)
U10530A	2x4 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 2BLT4R Relight Assembly was designed 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.

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, STAR Enabled Wireless reporting
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
ILB CP20 HE AELR HV A	20W	90	2400	Title 20, STAR Enabled Wireless reporting

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 productsupportemergency@acuitybrands.com for any Emergency Battery related questions.

star
SELF-TESTING AUTOMATED REPORTING

+

Field Installed Emergency LED Driver

ILB CP10 HE A

Compliance Just Got Easier!

Using the STAR mobile application with STAR-enabled emergency lighting products, meeting these emergency lighting requirements is simpler than ever! STAR-enabled emergency lighting equipment automatically conducts the brief monthly tests and full 90-minute annual tests, as required by code. Test results are logged internally within the unit and communicated wirelessly to the STAR app.

It's That Simple!

Walk Around | Connect | Collect | Collate

DOWNLOAD CLAIRTY™+

Available on the App Store

ANDROID APP ON Google play

Application Guide

2BLT4R — 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.

2BLT4R 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

Standard BLTR bracket with T-grid flange

BLTR "F" bracket without return flange

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)
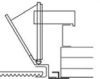- 2x2 = CI code *257YX0 T5746 (qty 2 required per kit)
- 1x4 = CI code *259VRM T5745 (qty 2 required per kit)

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

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

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
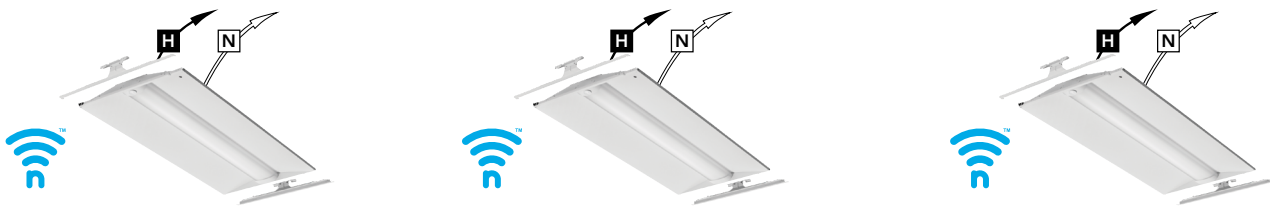
BLTR Series

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 CL**AIR**ITY 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

CAT5e

BLTR Series

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

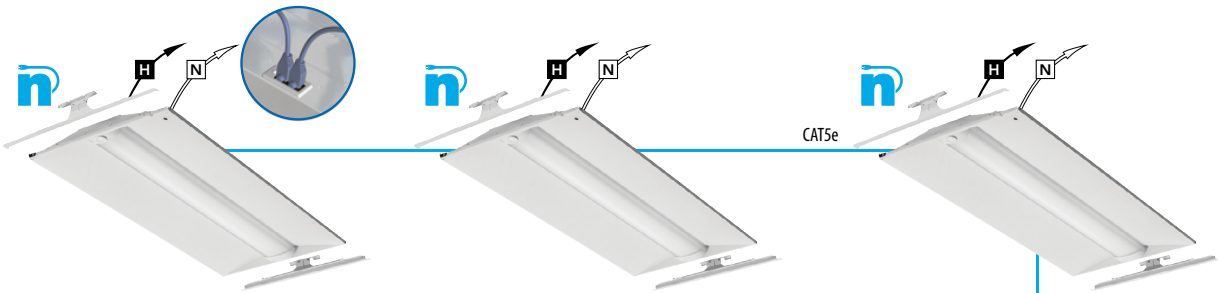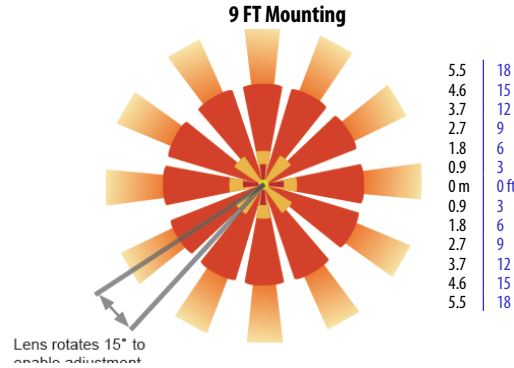| Sensor Options					
Option	Automatic Dimming Photocell	Occupancy Sensing		nLight Wired Networking	nLight AIR Networking
		PIR	PDT		
MSD7ADCX	X	X			
MSDPDT7ADCX	X		X		
NES7		X		X	
NES7ADCX	X	X		X	
NESPDT7			X	X	
NESPDT7ADCX	X		X	X	
RES7	X	X			X
RESPDT7	X	X	X		X

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 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)

MOTION	NO MOTION			MOTION
Occupants Detected In The Space	Room Unoccupied			Sensor Detects Motion

LIGHT LEVEL — MAX ... MIN

LIGHTS ON | 17.5 MIN TIME DELAY | 2.5 MIN AT A 1% LEVEL | LIGHTS OFF | LIGHTS ON

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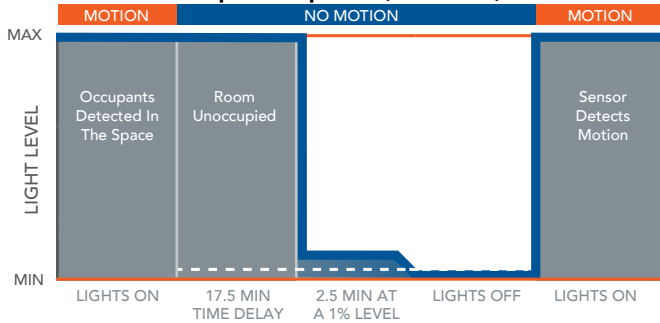
Sequence of Operation (nES7 and rES7 and Sensor)

MOTION	NO MOTION			MOTION
Occupants Detected In The Space	Room Unoccupied			Sensor Detects Motion

LIGHT LEVEL — MAX ... MIN

LIGHTS ON | 7.5 MIN TIME DELAY | 2.5 MIN AT A 1% LEVEL | LIGHTS OFF | LIGHTS ON

*The presetting on the automatic dimming photocell is 5fc (NES7) and 10fc (RES7).
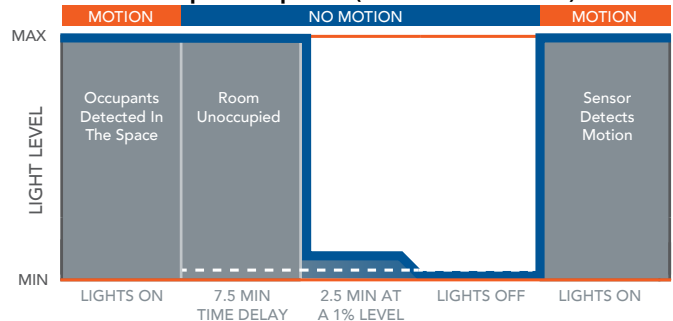
Controls Accessories

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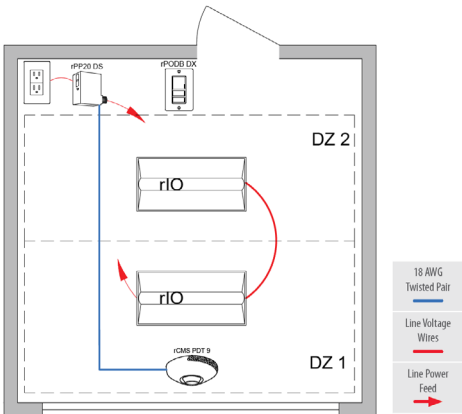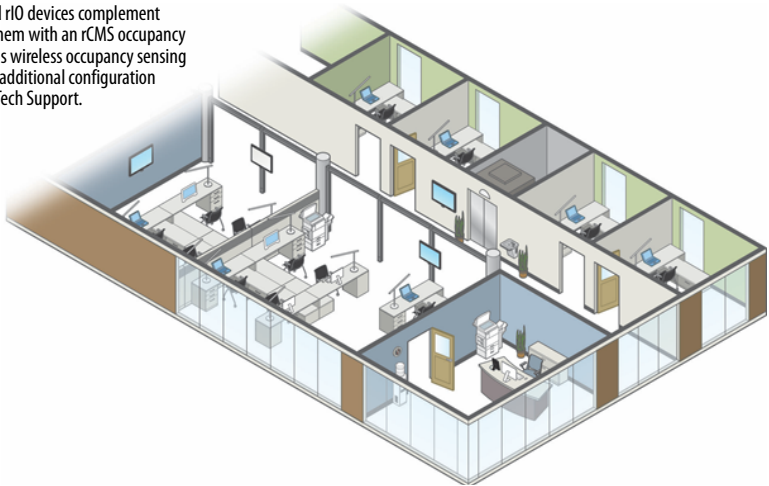*Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.*

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	[blank] PIR Detection	10 Large Motion/ Extended Range 360°	[BLANK] None	G2 Generation 2 compatibility
	PS 150 Standard 150 mA Power Supply	PDT Dual Tech PIR/ Microphonics	9 Small Motion/ Extended Range 360°	AR Auxiliary Relay	
			6 High Bay 360° Lens		

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
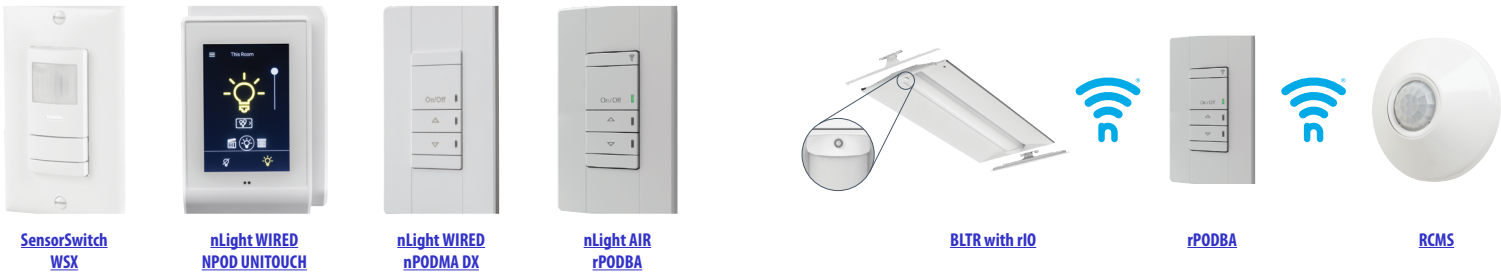
Constant Lumen Management

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.

POWER INPUT — 34W

LIGHT OUTPUT

Wasted Energy

27W

THOUSAND OPERATING HOURS

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

Saved Energy

POWER INPUT — 34W

LIGHT OUTPUT

27W

THOUSAND OPERATING HOURS
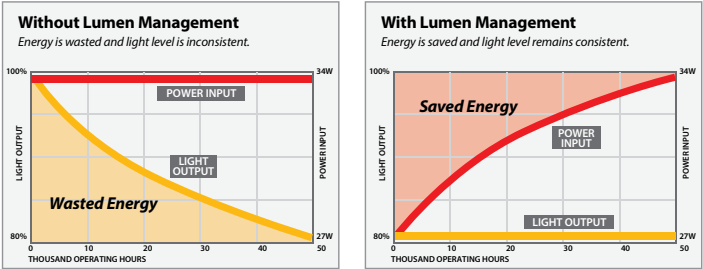
PHOTOMETRICS

2BLT4R 40L ADP LP835, 3945 delivered lumens

CP Summary

	0°	90
0°	1356	1356
5°	1330	1361
15°	1269	1309
25°	1147	1212
35°	984	1085
45°	795	938
55°	599	777
65°	407	609
75°	216	437
85°	54	179
90	6	2

Coefficients of Utilization

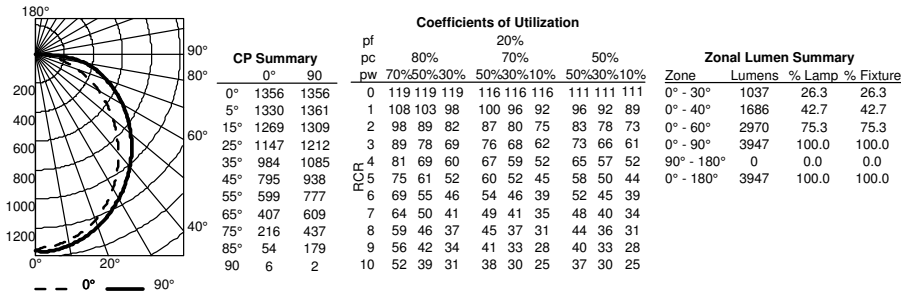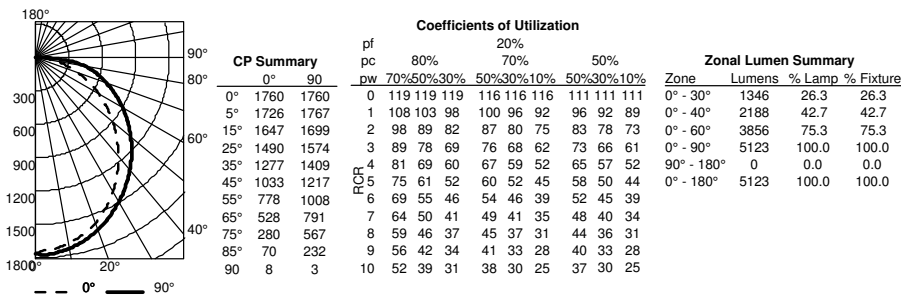| pf									
pc	20%								
pw	80%			70%			50%		
	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	108	103	98	100	96	92	96	92	89
2	98	89	82	87	80	75	83	78	73
3	89	78	69	76	68	62	73	66	61
4	81	69	60	67	59	52	65	57	52
5	75	61	52	60	52	45	58	50	44
6	69	55	46	54	46	39	52	45	39
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°	1037	26.3	26.3
0° - 40°	1686	42.7	42.7
0° - 60°	2970	75.3	75.3
0° - 90°	3947	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3947	100.0	100.0

--- 0° —— 90°

2BLT4R 48L ADP LP835, 5121 delivered lumens

CP Summary

	0°	90
0°	1760	1760
5°	1726	1767
15°	1647	1699
25°	1490	1574
35°	1277	1409
45°	1033	1217
55°	778	1008
65°	528	791
75°	280	567
85°	70	232
90	8	3

Coefficients of Utilization

pf									
pc	20%								
pw	80%			70%			50%		
	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°	1346	26.3	26.3
0° - 40°	2188	42.7	42.7
0° - 60°	3856	75.3	75.3
0° - 90°	5123	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	5123	100.0	100.0

--- 0° —— 90°

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%
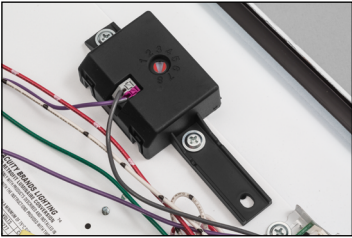
Simple adjustment of output through the use of a flat head screwdriver.

Performance Data			
Lumen Package	Lumens	Input Watts	LPW
30L ADP LP830	2832	23	125
30L ADP LP835	2932	23	129
30L ADP LP840	2979	23	131
30L ADP LP850	3064	23	135
40L ADP LP830	3825	31	123
40L ADP LP835	3960	31	128
40L ADP LP840	4023	31	130
40L ADP LP850	4138	31	134
48L ADP LP830	4743	38	126
48L ADP LP835	4910	38	130
48L ADP LP840	4989	38	133
48L ADP LP850	5131	38	136
60L ADP LP830	5753	46	124
60L ADP LP835	5956	46	128
60L ADP LP840	6051	46	130
60L ADP LP850	6224	46	134
72L ADP LP830	6928	59	118
72L ADP LP835	7173	59	122
72L ADP LP840	7287	59	124
72L ADP LP850	7495	59	128

HE Performance Data			
Lumen Package	Lumens	Input Watts	LPW
30LHE ADP LP830	2971	22	133
30LHE ADP LP835	3076	22	138
30LHE ADP LP840	3125	22	140
30LHE ADP LP850	3214	22	144
40LHE ADP LP830	3906	29	134
40LHE ADP LP835	4044	29	138
40LHE ADP LP840	4109	29	141
40LHE ADP LP850	4226	29	145
48LHE ADP LP830	4561	34	135
48LHE ADP LP835	4722	34	139
48LHE ADP LP840	4798	34	142
48LHE ADP LP850	4935	34	146
60LHE ADP LP830	5636	43	132
60LHE ADP LP835	5835	43	137
60LHE ADP LP840	5928	43	139
60LHE ADP LP850	6098	43	143
72LHE ADP LP830	6836	52	132
72LHE ADP LP835	7078	52	137
72LHE ADP LP840	7191	52	139
72LHE ADP LP850	7396	52	143
85LHE ADP LP830	7801	61	127
85LHE ADP LP835	8076	61	131
85LHE ADP LP840	8205	61	133
85LHE ADP LP850	8440	61	137