gotham® | EVO®

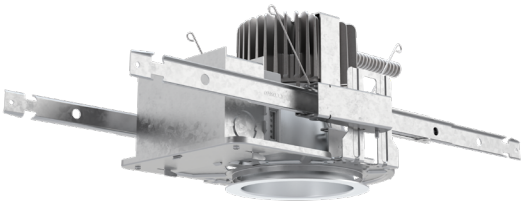
Multiple Layers of Light

Luminaire Type:

Catalog Number:

Buy American | ENERGY STAR | DESIGN2SHIP

General Illumination Round Downlight 4"



OVERVIEW

Feature Set

- Bounding Ray™ optical design
- Unitized optics mechanically attach the light engine to the lower reflector for complete optical alignment.
- 45° cutoff to source and source image
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- Fixtures are wet location, covered ceiling
- Available with 10% dimming, 1% dimming, or dim to dark
- Batwing distribution with feathered edges provides even illumination on horizontal and vertical surfaces
- ENERGY STAR® certified product

Distribution

Superior Perfomance

Nominal Lumens	250	500	750	1000	1500	2000	2500	3000	3500
Delivered Lumens	271	573	808	1001	1527	1994	2580	3110	3612
Wattage	3.1	7.2	7.9	8.8	13.7	19.5	25.7	31.2	38.4
Lumens per Watt	87.4	79.6	102.3	113.8	111.5	102.3	100.4	99.7	94.1

COMPLEMENTARY PRODUCTS

Coordinated Apertures | Multiple Layers of Light

General Illumination Layer | EVO

High Center Beam Layer | Incito

EVO + Incito — Multiple Layers of Light

Core

Healthcare

Special Applications

GOTHAM ARCHITECTURAL DOWNLIGHTING | 1400 Lester Road Conyers, GA 30012 | P 800-705-SERV (7378) | gothamlighting.com

ORDERING INFORMATION

A+ Capable options indicated by this color background.

Design2Ship Quick Ship Program: Options in green text qualify for Design2Ship — 5 business days from order entry to ship. Refer to Design2Ship Brochure for complete program details. **Maximum Order Quantity: 100 units; 50 for Chicago Plenum.**

Luminaire Type:

Catalog Number:

EXAMPLE: EV04 35/25 AR MWD LSS 120 EZ1

Series	Color Temperature	Nominal Lumen Values	Reflector & Flange Color	Trim Style	Distribution	Finish	Voltage
EV04	27/ 2700 K 30/ 3000 K 35/ 3500 K 40/ 4000 K 50/ 5000 K	02 250 lumens 05 500 lumens 07 750 lumens 10 1000 lumens 15 1500 lumens 20 2000 lumens 25 2500 lumens 30 3000 lumens 35 3500 lumens 40 4000 lumens 45 4500 lumens	AR Clear PR Pewter WTR Wheat GR Gold WR[1] White BR[1] Black WRAMF[1] White Anti-microbial	(blank) Self-flanged FL Flangeless	MD Medium (0.9 s/mh) MWD Medium wide (1.0 s/mh) WD Wide (1.2 s/mh)	LSS Semi-specular LD Matte-diffuse LS Specular	MVOLT 120 277 347[2,3]

Driver[4]		Control Interface		Options	
GZ10	0-10V driver dims to 10%	NLT[6]	nLight® dimming pack controls	SF	Single Fuse. Specify 120V or 277V
GZ1	0-10V driver dims to 1%	NLTER[2,6,10]	nLight® dimming pack controls emergency circuit	TRW[7]	White painted flange
EZ10	eldoLED 0-10V ECOdrive. Linear dimming to 10% min.	NLTAIR2[13,14]	nLight® Air enabled	TRBL[8]	Black painted flange
EZ1	eldoLED 0-10V ECOdrive. Linear dimming to 1% min.	NLTAIRER2[2,10,13]	nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit	EL[9]	Emergency battery pack, 10W, with integral test switch
EZB	eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	NLTAIREM2[2,13]	nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit with battery pack options.	ELR[9]	Emergency battery pack, 10W, with remote test switch
EDAB[4]	eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.			ELSD[9]	Emergency battery pack, 10W, with self-diagnostics, integral test switch
EDXB[4]	eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Minimum 1000 lumens. Includes termination resistor. Refer to DMXR Manual.			ELRSD[9]	Emergency battery pack, 10W, with self-diagnostics, remote test switch
ECOS2[5]	Lutron® Hi-Lume® 2-wire forward-phase driver.120V only. Minimum dimming level 1%. Min: 1000LM; Max: 2500LM			E10WCP[9]	Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch
ECOD[5]	Lutron Ecosystem digital Hi-Lume 1% soft-on, fade to black. Min: 250LLM; Max: 4000LM.			E10WCPR[9]	Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch
				N80[11]	nLight® Lumen Compensation
				BGTD	Bodine generator transfer device. Specify 120V or 277V.
				90CRI	High CRI (90+)
				CP[12]	Chicago Plenum. Specify 120V or 277V for 5000lm and above.
				RRL__	RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature.

ACCESSORIES — order as separate catalog numbers (shipped separately)

SCA4	Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to TECH-190.
CTAEV04	4" Aperture ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5").
CTA4-8 YK	4"-8" Aperture ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). For use with CWW/DWW trims, EDXB, CP or nTune options.
ISD BC	0-10V wallbox dimmer. Refer to ISD-BC.

ORDERING NOTES

1. Not available with finishes.
2. Not available with emergency battery pack options.
3. Supplied with factory installed step down transformer.
4. Refer to TECH-240 for compatible dimmers.
5. Not available with nLight® and XPoint options.
6. Must specify voltage.
7. For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with WR (white reflector) or FL (flangeless) option.
8. For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with BR (black reflector) or FL (flangeless) option.
9. 11" of plenum depth or top access required for battery pack maintenance.
10. ER for use as UL924 Emergency Operation via power sense lead. Will require an emergency hot feed and normal hot feed. EM for use as UL924 Emergency Operation via power interrupt detection.
11. Fixture begins at 80% light level. Must be specified with NLT or NLTER. Only available with EZ10 and EZ1 drivers.
12. Not available with ELR, HAO, EXA1, or EXAB options.
13. Not available DALI or DMX drivers. Not available with CP or N80 options. Not recommended for metal ceiling installations.
14. When combined with the EZ1, EZ10, or EZB option, normal luminaires (non-emergency) can be used as a normal power sensing device for nearby nLight AIR devices and luminaires with EM emergency options.

SPECIFICATIONS

Optical Assemby

Fully serviceable and upgradeable lensed LED light engine suitable for field maintenance or service from below the ceiling.

Optical design is a Bounding Ray™ design with 45° cutoff to source and source image. Top-down flash characteristic for superior glare control.

Unitized optics shall have mechanical attachment of the light engine to the lower reflector for complete optical alignment.

Electrical

The luminaire shall operate from a 50 or 60 Hz ±3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC. The fluctuations of line voltage shall have no visible effect on the luminous output.

The luminaire shall have a power factor of 90% or greater at all standard operating voltages and full luminaire output.

Sound Rated A+. Driver shall be >80% efficient at full load across all input voltages.

Input wires shall be 18AWG, 300V minimum, solid copper.

Controls

Luminaire shall be equipped with interface for nLight wired or wireless network with integral power supply as per specification.

Dimming

The luminaire shall be capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 – 10%, 100 – 1.0% or 100 – 0.1% of rated lumen output with a smooth shut off function to step to 0%.

eldoLED LED drivers shall conform to IEEE P1789 standards. Alternatively, manufacturers must demonstrate conformance with product literature and testing which demonstrates this performance. Systems that do not meet IEEE P1789 will not be considered.

Driver is inaudible in 24dB environment, and stable when input voltage conditions fluctuate over what is typically experienced in a commercial environment.

Construction

Luminaire housing shall be constructed of 20-gauge galvanized steel and have telescopic mounting bars with maximum 26" and minimum 15" extension and 4" vertical adjustment.

Luminaires shall be suitable for installation in ceilings up to 1½" thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 2").

Tool-less adjustments shall be possible after installation.

The assembly and manufacturing process for the luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration.

25°C ambient temperature standard (1/2" clearance on all sides from non-combustible materials in non-IC applications, unless marked spacing noted otherwise). For use in insulated ceilings, a 3" clearance on all sides from insulation is required (unless marked spacing noted otherwise).

Listings

Fixtures are CSA certified to meet US and Canadian Standards: All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, wet location covered ceiling. Luminaire configurations are Energy Star certified through testing in EPA–recognized laboratories, with the results reviewed by an independent, accredited certification organization. Visit www.energystar.gov for specific configurations listed.

Buy American

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to https://www.acuitybrands.com/resources/buy-american for additional information.

Photometrics

LEDs tested to LM-80 standards. Measured by IESNA Standard LM-79-08 in an accredited lab. Lumen output shall not decrease by more than 30% over the minimum operational life of 60,000 hours.

Color appearance from luminaire to luminaire of the same type and in all configurations, shall be consistent both initially and at 6,000 hours and operate within a tolerance of <2.5 MacAdam ellipse as defined by a point at the intersection of the CCT line and the black body locus line in CIE chromaticity space.

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.

A+ Capable Luminaire

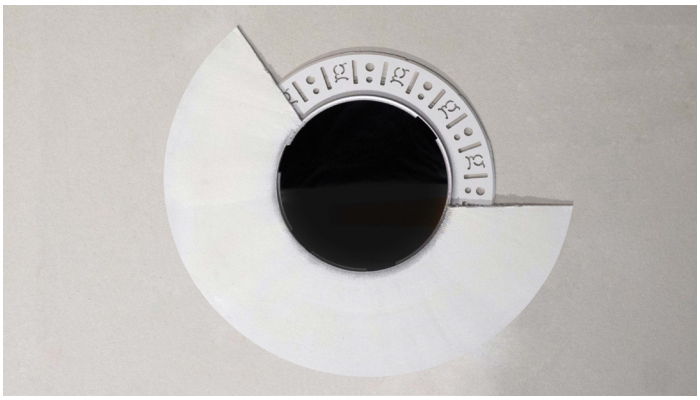
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- 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

Partially finished mud ring, showing cross-section detail.



An EVO downlight requires only approximately 3" of plaster to finish.

EVO with flangeless trim

Flangeless Installation

Gotham's flangeless option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flangeless downlight installation.

The polymer mud ring is installed independent of the of the recessed frame, therefore floating with the ceiling. This innovation minimizes any surface cracks during reflector installation, ceiling movement and any future service to the recessed frame, wiring, electronics, etc.

EVO - eldoLED Driver Default Dimming Curve			
Nomenclature	Min Dimming	Driver Dim Curve	Control Dim Curve
EZ10	10%	Linear	Linear/Logarithmic
EZ1	1%	Linear	Linear/Logarithmic
EXA1	1%	Linear	Linear/Logarithmic
EZB	<1%	Logarithmic	Linear
EDAB	<1%	Logarithmic	Linear
EXAB	<1%	Logarithmic	Linear
EDXB	<1%	Logarithmic	Linear

Distributions	
Distribution	Beam
MD	51
MWD	57
WD	73

CCT/CRI Multiplier Table		
CRI	CCT	Multiplier
80	2700K	0.96
	3000K	1.00
	3500K	1.00
	4000K	1.01
	5000K	1.07
90	2700K	0.80
	3000K	0.83
	3500K	0.85
	4000K	0.87
	5000K	0.91

Reflector Finish Multiplier	
Reflector Finish	Multiplier
LS - Specular	1
LSS - Semi Specular	0.956
WR - White	0.87
LD - Matte Diffuse	0.85
BR - Black	0.73

Driver		Control Provided (note: 347V/UVOLT versions provided with 347 option selected)				
Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIR2ER	NLTAIREM2
GZ10	0-10V driver dims to 10%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
GZ1	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZ10	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZ1	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZB	eldoLED 0-10V SOLOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2

How to Estimate Delivered Lumens in Emergency Mode

Delivered Lumens = 1.25 x P x LPW

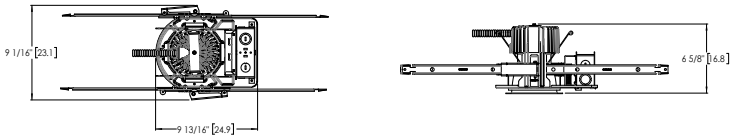
P = Output power of emergency driver. P = 10W for PS1055CP

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

DIMENSIONAL DATA

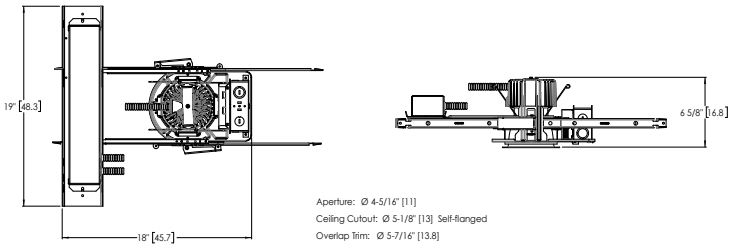
Aperture: 4-5/16" (11)	Ceiling Opening: 5-1/8" (13) self-flanged
Overlap trim: 5-7/16" (13.8)	5-1/4" (13.3) flangeless

Standard



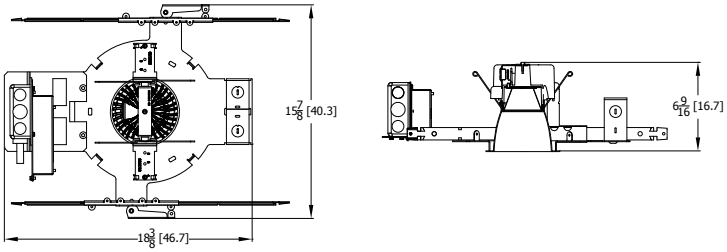
Aperture: Ø 4-5/16" [11]
Ceiling Cutout: Ø 5-1/8" [13] Self-flanged
Overlap Trim: Ø 5-7/16" [13.8]
Ceiling Cutout: Ø 5-1/4" [13.3] Flangeless

Battery Pack

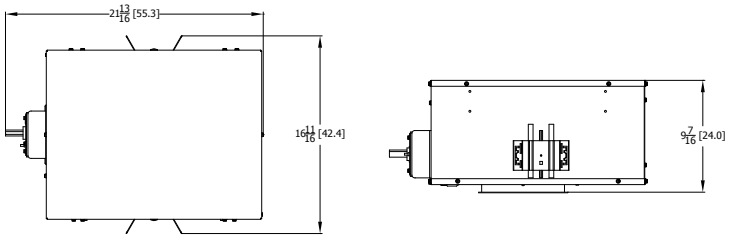


Aperture: Ø 4-5/16" [11]
Ceiling Cutout: Ø 5-1/8" [13] Self-flanged
Overlap Trim: Ø 5-7/16" [13.8]
Ceiling Cutout: Ø 5-1/4" [13.3] Flangeless

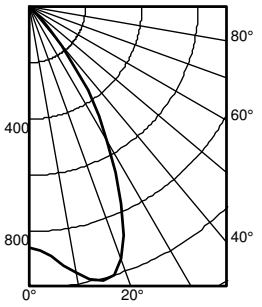
CP Standard



CP Enclosed For Use With Battery Pack & nLight



EV04 35/10 MWD LS INPUT WATTS: 8.8W, DELIVERED LUMENS: 1001.7LM, LPW = 113.8, 1.08 S/MH, TEST NO. LTL27786P131



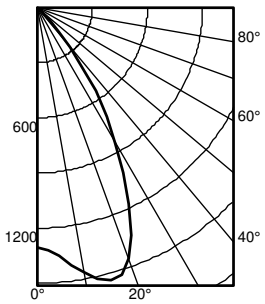
	Ave	Lumens
0	856	
5	888	87
15	1010	280
25	775	350
35	363	225
45	61	56
55	2	2
65	1	1
75	0	0
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	717.4	71.6
0° - 40°	942.0	94.0
0° - 60°	1000.8	99.9
0° - 90°	1001.7	100.0
90° - 180°	0.0	0.0
0° - 180°	1001.7	*100.0
*Efficiency		

pf	80%			20%			50%		
pc				70%					
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	105	103	101
2	103	99	96	101	98	95	98	95	93
3	96	91	87	95	90	87	92	88	85
4	90	84	80	89	84	80	87	82	79
5	84	78	74	83	78	74	81	77	73
6	79	73	69	78	72	68	76	72	68
7	74	68	64	73	68	64	72	67	63
8	70	64	59	69	63	59	68	63	59
9	66	60	56	65	59	56	64	59	55
10	62	56	52	61	56	52	61	56	52

		50% beam - 56.7°		10% beam - 79.7°	
Mounting Height	Inital FC Center Beam	Diameter	FC	Diameter	FC
8.0	28.3	5.9	14.1	9.2	2.8
10.0	15.2	8.1	7.6	12.5	1.5
12.0	9.5	10.3	4.7	15.9	0.9
14.0	6.5	12.4	3.2	19.2	0.6
16.0	4.7	14.6	2.3	22.5	0.5

EV04 35/15 MWD LSS INPUT WATTS: 13.7W, DELIVERED LUMENS: 1527.3LM, LPW = 111.4, 1.08 S/MH, TEST NO. LTL27786P137



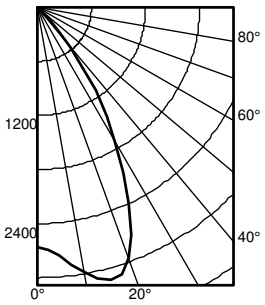
	Ave	Lumens
0	1305	
5	1354	133
15	1539	428
25	1181	533
35	553	342
45	93	86
55	2	4
65	1	1
75	0	0
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	1093.9	71.6
0° - 40°	1436.2	94.0
0° - 60°	1525.8	99.9
0° - 90°	1527.3	100.0
90° - 180°	0.0	0.0
0° - 180°	1527.3	*100.0
*Efficiency		

pf	80%			20%			50%		
pc				70%					
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	105	103	101
2	103	99	96	101	98	95	98	95	93
3	96	91	87	95	90	87	92	88	85
4	90	84	80	89	84	80	87	82	79
5	84	78	74	83	78	74	81	77	73
6	79	73	69	78	72	68	76	72	68
7	74	68	64	73	68	64	72	67	63
8	70	64	59	69	63	59	68	63	59
9	66	60	56	65	59	56	64	59	55
10	62	56	52	61	56	52	61	56	52

		50% beam - 56.7°		10% beam - 79.7°	
Mounting Height	Inital FC Center Beam	Diameter	FC	Diameter	FC
8.0	43.2	5.9	21.6	9.2	4.3
10.0	23.2	8.1	11.6	12.5	2.3
12.0	14.5	10.3	7.2	15.9	1.4
14.0	9.9	12.4	4.9	19.2	1.0
16.0	7.2	14.6	3.6	22.5	0.7

EV04 35/30 MWD LSS INPUT WATTS: 31.2W, DELIVERED LUMENS: 3110.6LM, LPW = 99.6, 1.08 S/MH, TEST NO. LTL27786P155



	Ave	Lumens
0	2659	
5	2758	271
15	3135	871
25	2406	1086
35	1126	697
45	189	175
55	5	7
65	2	2
75	0	1
85	0	0
90	0	

Zone	Lumens	% Lamp
0° - 30°	2227.9	71.6
0° - 40°	2925.0	94.0
0° - 60°	3107.6	99.9
0° - 90°	3110.6	100.0
90° - 180°	0.0	0.0
0° - 180°	3110.6	*100.0
*Efficiency		

pf	80%			20%			50%		
pc				70%					
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	111	108	106	109	106	104	105	103	101
2	103	99	96	101	98	95	98	95	93
3	96	91	87	95	90	87	92	88	85
4	90	84	80	89	84	80	87	82	79
5	84	78	74	83	78	74	81	77	73
6	79	73	69	78	72	68	76	72	68
7	74	68	64	73	68	64	72	67	63
8	70	64	59	69	63	59	68	63	59
9	66	60	56	65	59	56	64	59	55
10	62	56	52	61	56	52	61	56	52

		50% beam - 56.7°		10% beam - 79.7°	
Mounting Height	Inital FC Center Beam	Diameter	FC	Diameter	FC
8.0	87.9	5.9	43.9	9.2	8.8
10.0	47.3	8.1	23.6	12.5	4.7
12.0	29.5	10.3	14.7	15.9	2.9
14.0	20.1	12.4	10.1	19.2	2.0
16.0	14.6	14.6	7.3	22.5	1.5

NLIGHT AIR

NLIGHT

nLight® AIR is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

nLight® AIR Control Accessories

Order as separate catalog number. Visit nLight AIR.

Wall Switches	Model Number
On/Off single pole	rPODB (color) G2
On/Off two pole	rPODB 2P (color) G2
On/Off & raise/lower single pole	rPODB DX (color) G2
On/Off & raise/lower two pole	rPODB 2P DX (color) G2

nLight® AIR Control Accessories *(cont.)*

Occupancy Sensors (PIR/dual tech)	Model Number
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

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.

nLight® The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

nLight® Wired Control Accessories

Order as separate catalog number. Visit nLight.

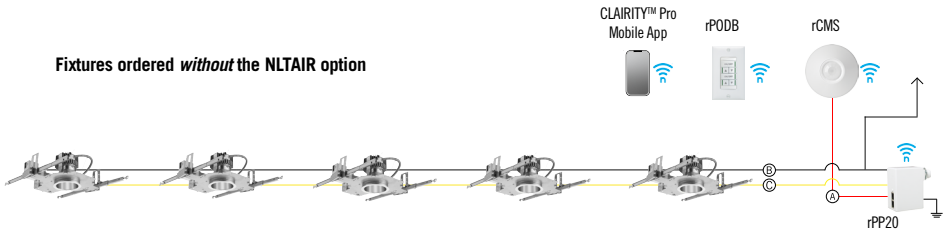
Wall Switches	Model Number
On/Off single pole	nPODM (color)
On/Off two pole	nPODM 2P (color)
On/Off & raise/lower single pole	nPOD DX (color)
On/Off & raise/lower two pole	nPODM 2P DX (color)
Graphic touchscreen	nPOD GFX (color)
Photocell Controls	
Dimming	nCM ADCX

nLight® Wired Control Accessories *(cont.)*

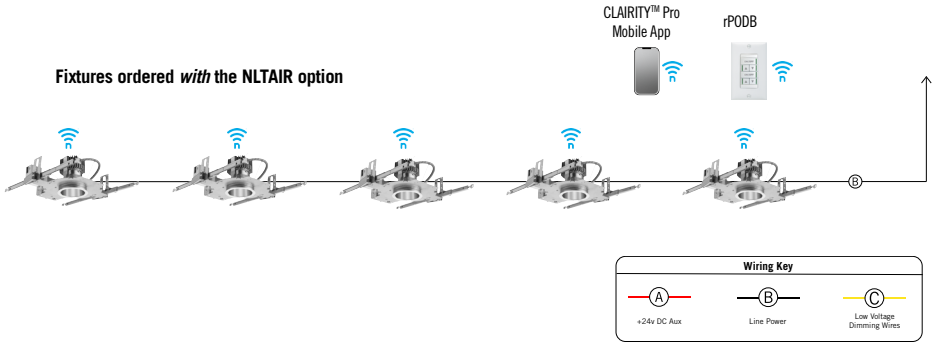
Occupancy Sensors (PIR/dual tech)	Model Number
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX
Cat-5 Cables (plenum rated)	
10', CAT5	CAT5 10FT J1
15', CAT5	CAT5 15FT J1

Possibilites for nLight® AIR

Fixtures ordered *without* the NLTAIR option

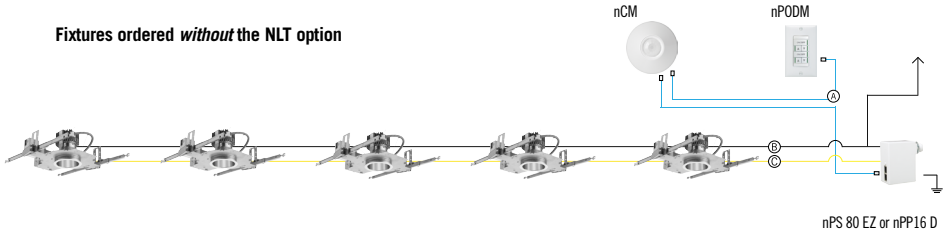


Fixtures ordered *with* the NLTAIR option



Possibilites for nLight® wired

Fixtures ordered *without* the NLT option



Fixtures ordered *with* the NLT option