gotham® | EVO®

Multiple Layers of Light

Luminaire Type:

Catalog Number:

General Illumination Square Downlight 2"



OVERVIEW

Feature Set

- Batwing distribution with feathered edges provides even illumination on horizontal and vertical surfaces
- Bounding Ray™ optical design
- 50° Cutoff to source and source image
- Field interchangeable optic
- 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

Distribution



Superior Performance

Nominal lumens	250	500	750	1000	1500	2000
Delivered	284	580	861	1152	1650	2248
Wattage	3.4	6.3	9.7	12.7	21.2	31.7
Efficacy	84	92	89	90	78	71

*Based on 3500K 80CRI 15D AR LSS

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

COMPLIMENTARY 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



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ORDERING INFORMATION

Design Select options indicated by this color background.

Luminaire Type:

Catalog Number:

EXAMPLE: EVO2SQ 35/20 AR LSS ND MVOLT UGZ

Series		Color Temperature		Lumens		Reflector Color		Flange Type		Reflector Finish		Distribution	
EVO2SQ	EVO 2in Square Open Downlight	**27/**	2700 K	**02**	250 lumens	**AR**	Clear	**(blank)**	Self-flanged	**LSS**	Semi-specular	**ND**	Narrow (0.8 s/mh)
		30/	3000 K	**05**	500 lumens	**PR**	Pewter	**FL**	Flangeless	**LD**	Matte diffuse	**MWD**	Medium Wide (1.0 s/mh)
		35/	3500 K	**07**	750 lumens	**WTR**	Wheat					**WD**	Wide (1.2 s/mh)
		40/	4000 K	**10**	1000 lumens	**GR**	Gold						
		50/[1]	5000 K	**15**	1500 lumens	**WR**[2]	White painted						
				20	2000 lumens	**BR**[2]	Black						
						BZR[2]	Dark Bronze painted						

Voltage		Driver		Control Interface[4]		Options	
MVOLT	120V - 277V	**UGZ**[3]	Universal dimming to 1% (0-10V, 120V TRIAC or ELV)	**(blank)**		**90CRI**[1]	High CRI (90+)
120	120V			**NLT**	nLight® dimming pack.	**NCH**[6]	Structural reinforcement pan
277	277V			**NLTER**[5]	nLight® dimming pack for fixtures on emergency circuit	**ICAT**[7]	IC/Airtight housing construction
				NLTAIR2	nLight® AIR dimming pack.	**CP**[7]	Chicago Plenum
				NLTAIRER2[5]	nLight® AIR dimming pack for fixtures on emergency circuit	**HAO**[8]	High ambient (40°C)
				NLTAIREM2	nLight® AIR dimming pack for fixtures on emergency circuit	**N80**[11]	nLight Lumen Compensation
						TRW[9]	White painted flange
						TRBL[10]	Black painted flange

ACCESSORIES — order as separate catalog numbers (shipped separately)

SDT 347/120 75VA	347V/120V, 75VA step down transformer. Must be remote mounted.

ORDERING NOTES

1. 5000K CCT not available with 90CRI
2. Not available with Reflector Finish
3. Refer to Tech 240 for compatible dimmers.
4. Field installed. Access required to location of remote mounted device
5. ER for use with generator supply power. Will require an emergency hot feed and normal hot feed.
6. NCH is required for T-grid ceilings or where code requires.
7. Not available with 1500lm or 2000lm
8. Not available with 2000lm
9. For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not available with WR (White Reflector). Not available with FL.
10. For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not available with BR (Black Reflector). Not available with FL.
11. Requires NLT or NLTER.

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SPECIFICATIONS

Optical and Trim Assembly

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 50° cutoff to source and source image. Top down flash characteristic for superior glare control.

Flangeless trim option includes proprietary Gotham mud ring enabling seamless integration into drywall applications. Mud ring ships separately. Superior 100% Virgin-silicone refractive optic, enables maximum dimensional stability and optical transmission with no discoloration over life. Field inter-changeable optics.

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. Support 347V via remote-mounted stepdown transformer. 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.

Controls

Luminaire shall be equipped with interface for nLight wired or nLight AIR networks 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 – 1.0% of rated lumen output with a smooth shut off function to step to 0%.

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

Construction

Light engine and driver are accessible from below ceiling.

Several additional mounting options available including a structural reinforcement pan, Chicago plenum, and Type IC.

Anodized extruded aluminum wiring compartment with hinged access. With two 1/2" trade-sized knockouts rated for 90ºC.

Accommodates between 3/8" to 2-3/4"-thick ceilings.

Listings

Fixtures are UL 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.

IC rated with ICAT option. Fixtures with ICAT option are compatible with spray foam insulation with an R-value of 4.3 per inch or less.

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 the center of the quadrangles defined in ANSI C78.377-2015.

Government Procurement

BAA - Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations,
BABA - Build America Buy America: Product 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.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provided consistent color appearance and out-of-the-box control capability with simple commissioning when used with Acuity Brands controls products.

All configurations of this luminaire are calibrated and tested meet the Acuity Brands' specification for chromatic consistency - including color rendering, color fidelity and color temperature tolerance around standard CIE chromaticity coordinates.

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

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Lumen Output Multiplier		
CRI	CCT	Multplier
80	2700K	0.910
	3000K	0.946
	3500K	1.000
	4000K	1.027
	5000K	1.054
90	2700K	0.784
	3000K	0.847
	3500K	0.874
	4000K	0.946

Reflector Finish Multiplier	
Reflector Finish	Multiplier
LSS - Semi Specular	1.00
LD - Matte Diffuse	0.98
Reflector Color	**Multiplier**
WR - White	0.98
BR - Black	0.92
BZR - Bronze	0.91
AR - Clear	1.00
GR - Gold	0.99
PR - Pewter	0.99
WTR - Wheat	0.98

Driver		Control Provided				
Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIREM2	NLTAIRER2
UGZ	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V EM G2	RPP20 D 24V ER G2

Marked Spacing in Inches 25°C Ambient			
Lumen Package	Fixed Center to Center MIN	Fixture Center to Building Member MIN	Space Above Fixture
2000	18	9	3
1500 (HAO)	18	9	3

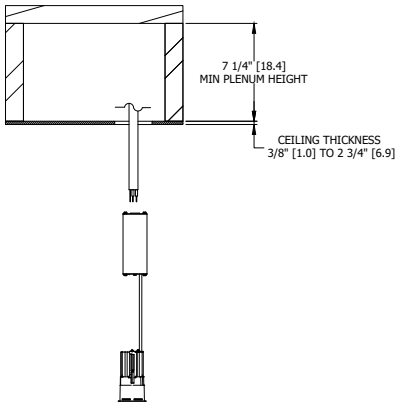
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DIMENSIONAL DATA

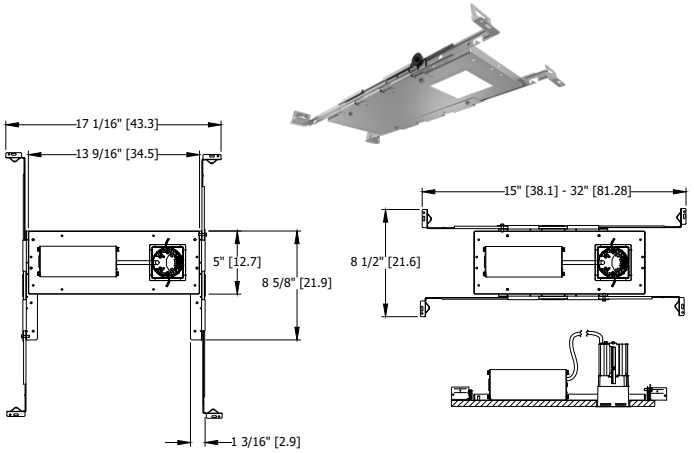
*Dimensions in inches [centimeters]

Aperture: 2-1/4" [5.7]	Ceiling Opening: 2-5/8" [6.7] self-flanged
Overlap Trim: 3" [7.6]	2-3/4" [7] flangeless

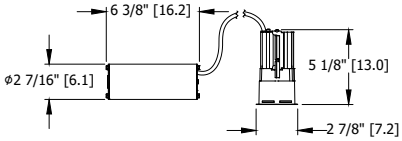
Recessed Application - Minimum Clearance Requirements



Structural Reinforcement Pan



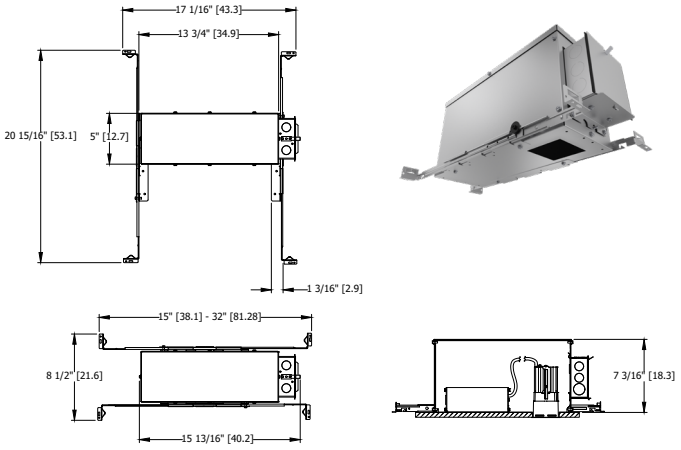
1000 Lumen and Below Install-from-Below Construction



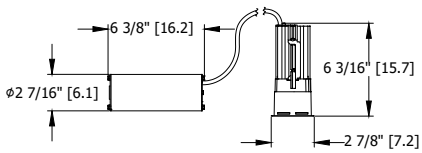
Ceiling cutout: 2 5/8" x 2 5/8 [6.7 x 6.7]
Flex conduit length: 16" [40.6]
Ceiling thickness range: 3/8" [1.3] to 2 3/4" [6.9]



IC / Airtight Housing / Chicago Plenum Construction



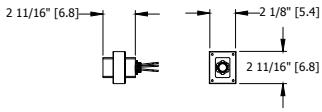
1500 and 2000 Lumen or High Ambient Option Install-from-Below Construction



Ceiling cutout: 2 5/8" x 2 5/8" [6.7 x 6.7]
Flex conduit length: 16" [40.6]
Ceiling thickness range: 3/8" [1.3] to 2 3/4" [6.9]



347V Transformer



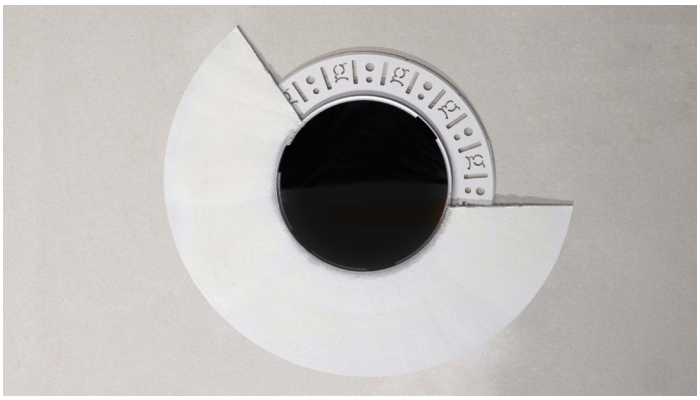
347 Transformer:
Install to accessible
junction box by others

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gotham®



Partially finished mud ring, showing cross-section detail.



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



ICO with flangeless trim

Flangeless Installation

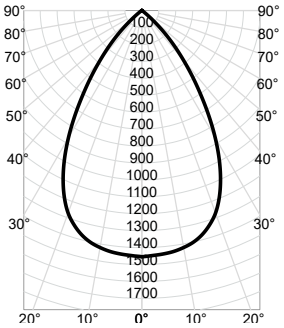
Gotham's flangeless option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flangeless downlight installation.

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.

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CONSULT WWW.GOTHAMLIGHTING.COM FOR ADDITIONAL PHOTOMETRY

EVO2SQ 35/15 AR LSS MWD Input Watts: 21.2, Delivered Lumens: 1654, LPW: 78.0, S/MH: 1.01, Test No: 19-649-05P65



CP Summary

0°	
0°	1,454
5°	1,443
15°	1,371
25°	1,100
35°	607
45°	202
55°	14
65°	4
75°	1
85°	0
90°	0

Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	1,041	63%
0° - 40°	1,448	88%
0° - 60°	1,649	100%
0° - 90°	1,654	100%
90° - 180°	0	0%
0° - 180°	1,654	100%

Coefficients of Utilization

ρf	ρc	pw	80% 50%	80% 30%	80% 10%	20% 50%	20% 30%	20% 10%	50% 50%	50% 30%	50% 10%
		0	119	119	119	117	117	117	111	111	111
		1	111	108	106	108	106	104	104	103	101
		2	102	98	95	101	97	94	97	94	91
		3	95	90	85	93	89	85	91	87	83
		4	88	82	78	87	81	77	85	80	76
		5	82	76	71	81	75	71	79	74	70
		6	76	70	65	76	70	65	74	69	65
		7	71	65	60	71	65	60	69	64	60
		8	67	60	56	66	60	56	65	60	56
		9	63	56	52	62	56	52	61	56	52
		10	59	53	49	59	53	49	58	52	49

Cone of Light

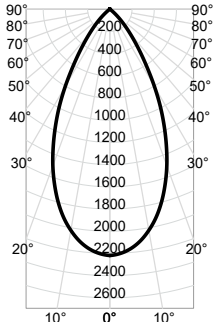
Mounting Height	Initial FC Center Beam	Beam Diameter
6.0	40.4	7.7
8.0	22.7	10.3
10.0	14.5	12.8
12.0	10.1	15.4
14.0	7.4	17.9

Beam Angle: 65.3°
Field Angle: 93.8°

Luminance (cd/sq.m)

Average Luminance	
0°	433,478
45°	85,010
55°	7,486
65°	2,752
75°	1,382
85°	1,026

EVO2SQ 35/15 AR LSS ND Input Watts: 21.2, Delivered Lumens: 1714, LPW: 80.8, S/MH: 0.79, Test No: 19-649-04P65



CP Summary

0°	
0°	2,219
5°	2,165
15°	1,798
25°	1,157
35°	489
45°	136
55°	10
65°	3
75°	1
85°	0
90°	1

Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	1,243	73%
0° - 40°	1,575	92%
0° - 60°	1,710	100%
0° - 90°	1,714	100%
90° - 180°	0	0%
0° - 180°	1,714	100%

Coefficients of Utilization

ρf	ρc	pw	80% 50%	80% 30%	80% 10%	20% 50%	20% 30%	20% 10%	50% 50%	50% 30%	50% 10%
		0	120	120	120	117	117	117	112	112	112
		1	111	109	107	109	107	105	105	103	102
		2	104	100	97	102	99	95	99	96	93
		3	97	92	88	96	91	88	93	89	86
		4	91	85	81	90	85	81	88	83	80
		5	85	79	75	84	79	75	82	78	74
		6	80	74	70	79	74	70	78	73	69
		7	75	70	65	75	69	65	74	69	65
		8	71	65	61	71	65	61	70	65	61
		9	67	62	58	67	61	58	66	61	57
		10	64	58	54	64	58	54	63	58	54

Cone of Light

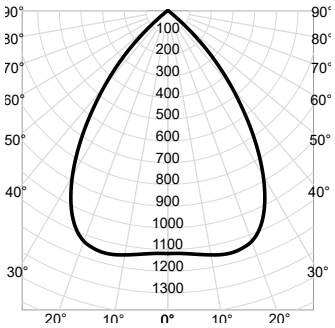
Mounting Height	Initial FC Center Beam	Beam Diameter
6.0	61.6	5.8
8.0	34.7	7.7
10.0	22.2	9.6
12.0	15.4	11.5
14.0	11.3	13.5

Beam Angle: 51.4°
Field Angle: 83.6°

Luminance (cd/sq.m)

Average Luminance	
0°	661,608
45°	57,306
55°	5,250
65°	1,834
75°	1,037
85°	684

EVO2SQ 35/15 AR LSS WD Input Watts: 21.2, Delivered Lumens: 1623, LPW: 76.6, S/MH: 1.17, Test No: 19-649-06P65



CP Summary

0°	
0°	1,119
5°	1,124
15°	1,153
25°	1,042
35°	672
45°	254
55°	20
65°	5
75°	2
85°	0
90°	1

Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	922	57%
0° - 40°	1,365	84%
0° - 60°	1,616	100%
0° - 90°	1,623	100%
90° - 180°	0	0%
0° - 180°	1,623	100%

Coefficients of Utilization

ρf	ρc	pw	80% 50%	80% 30%	80% 10%	20% 50%	20% 30%	20% 10%	50% 50%	50% 30%	50% 10%
		0	119	119	119	117	117	117	111	111	111
		1	110	108	105	108	106	103	104	102	100
		2	102	97	93	100	96	92	97	93	90
		3	94	88	84	92	87	83	90	85	82
		4	86	80	76	85	80	75	83	78	74
		5	80	74	69	79	73	68	77	72	68
		6	74	68	63	73	67	63	72	66	62
		7	69	62	58	68	62	57	67	61	57
		8	64	58	53	64	57	53	62	57	53
		9	60	53	49	59	53	49	58	53	49
		10	56	50	45	56	49	45	55	49	45

Cone of Light

Mounting Height	Initial FC Center Beam	Beam Diameter
6.0	31.1	9.0
8.0	17.5	12.0
10.0	11.2	15.0
12.0	7.8	18.1
14.0	5.7	21.1

Beam Angle: 73.9°
Field Angle: 97.1°

Luminance (cd/sq.m)

Average Luminance	
0°	333,562
45°	107,232
55°	10,293
65°	3,739
75°	1,843
85°	1,368

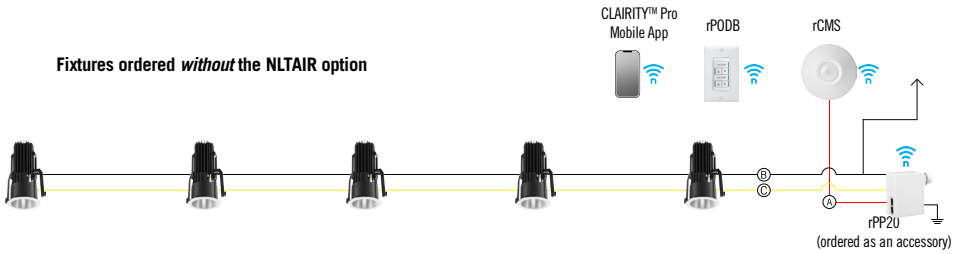
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NLIGHT AIR

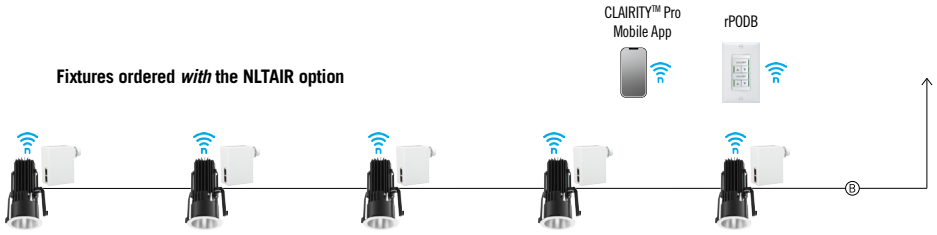
Possibilites for nLight® AIR

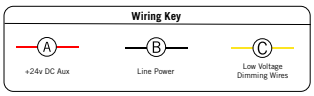
nLight® AIR is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility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

Fixtures ordered *without* the NLTAIR option



Fixtures ordered *with* the NLTAIR option





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.)*

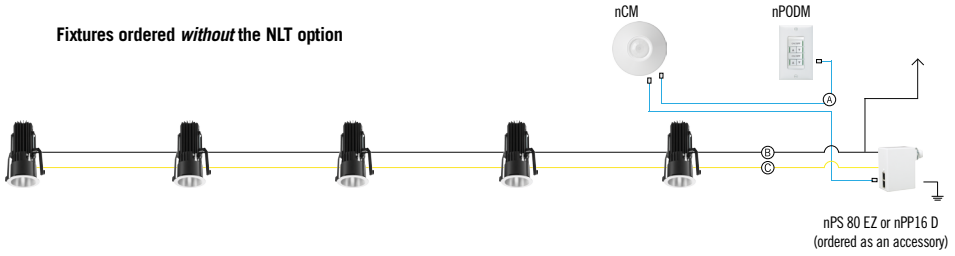
Occupancy Sensors (PIR/dual tech)	Model Number
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

NLIGHT

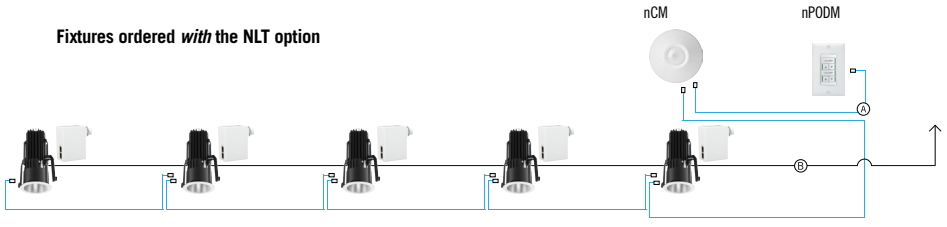
Possibilites for nLight® wired

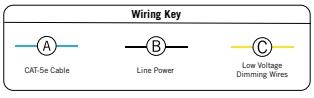
nLight® Wired The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

Fixtures ordered *without* the NLT option



Fixtures ordered *with* the NLT option





nLight® Wired Control Accessories

Order as separate catalog number. Visit nLight.

Wall Switches	Model Number
On/Off single pole	nPODM (XX)
On/Off two pole	nPODM 2P (XX)
On/Off & raise/lower single pole	nPOD DX (XX)
On/Off & raise/lower two pole	nPODM 2P DX (XX)
Graphic touchscreen	nPOD GFX (XX)
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

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