



## General Illumination Retrofit Shower Downlight

4"

### Feature Set

- Wipe down flush or regressed lens
- NSF2 Splash/Non-food Zone
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- IP66 rated room-side, Fixtures are wet location, covered ceiling
- Anti-microbial paint finish

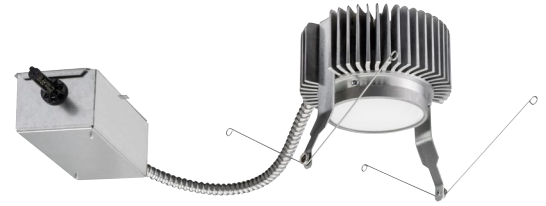
### Distribution



### Superior Performance

Nominal Lumens	1000	1500	2000	2500	3000	3500
Delivered	843	1281	1684	2165	2598	3031
Wattage	8.8	13.7	19.5	25.7	31.2	38.4
Efficacy	95.8	93.5	86.4	84.2	83.3	78.9

\*Lumen output for CRI80 - 3500K



### Coordinated Apertures | Multiple Layers of Light



















General Illumination Layer | EVO

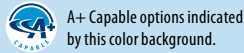


High Center Beam Layer | Incito



EVO + Incito — Multiple Layers of Light

 Downlight	 Open Wallwash	 Lensed Wallwash	 Cylinder	 Downlight	 Adjustable	 Lensed Wallwash	 Cylinder	<b>Core</b>
 MRI	 Surgical Suite	 Patient Room						<b>Healthcare</b>
 Dynamic	 Food Service	 Vandal	 Clean Room	 Shower				<b>Special Applications</b>



Luminaire Type:

Catalog Number:

EXAMPLE: EV04RSH 35/20 DFFAMF SOL MVOLT EZ10

Series	Color Temperature	Nominal Lumen Values	Lens Setting	Lens	Voltage
EV04RSH <sup>1</sup>	27/ 2700 K	10 1000 lumens	DFR Regressed lensed trim	SOL Textured Lens	MVOLT
	30/ 3000 K	15 1500 lumens	DFF Flush lensed trim	SMO Smooth Clear Lens	120
	35/ 3500 K	20 2000 lumens	DFRAMF Regressed lensed trim with anti-microbial finish		277
	40/ 4000 K	25 2500 lumens	DFFAMF Flush lensed trim with anti-microbial finish		
	50/ 5000 K	30 3000 lumens			
		35 3500 lumens			

Driver <sup>2</sup>	Controls Interface	Options
EZ10 eldoLED 0-10V EC0drive. Linear dimming to 10% min.	NLT <sup>3</sup> nLight® dimming pack controls 0-10V eldoLED drivers.	SF Single Fuse. Specify 120V or 277V.
EZ1 eldoLED 0-10V EC0drive. Linear dimming to 1% min.	NLTER <sup>4</sup> nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit.	ELR <sup>5</sup> Emergency battery pack, 10W, with remote test switch
EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.		E10WCPR <sup>5</sup> Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch
EDAB eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.		BGTD Bodine generator transfer device. Specify 120V or 277V.
		90CRI High CRI (90+). Specify 120V or 277V.

**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: SCA8 10D. Refer to <a href="#">TECH-190</a> .
CTA4-8 YK	Ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). Adds ~4" to fixture height.
ISD BC	0-10V wallbox dimmer. Refer to <a href="#">ISD-BC</a> .

**ORDERING NOTES**

1. Consult factory for mounting frames other than Gotham.
2. Refer to [TECH-240](#) for compatible dimmers.
3. Specify voltage.
4. For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
5. Above ceiling access required.

### Optical 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 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  $\pm 3$  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 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

Compatible only with Gotham open style mounting frames. Originally installed mounting frame must be a Gotham GRS, GRSF, GRSH, AFV, or LGFV series frame. See frame compatibility table. Junction box capacity: 8 (4 in, 4 out) 12AWG rated for 90°C. 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 5") 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 IPP66 rated, room-side. NSF2 Splash/Non-Food Zone

### 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.

### Buy American Act

This product 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](http://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](http://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](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

DFF SMO - Flush Clear						
Nominal Lumens	1000	1500	2000	2500	3000	3500
Delivered	843	1281	1684	2165	2598	3031
Wattage	8.8	13.7	19.5	25.7	31.2	38.4
Efficacy	95.8	93.5	86.4	84.2	83.3	78.9

\*Lumen output for CRI80 - 3500K

DFF SOL - Flush Textured						
Nominal Lumens	1000	1500	2000	2500	3000	3500
Delivered	801	1218	1602	2059	2471	2883
Wattage	8.8	13.7	19.5	25.7	31.2	38.4
Efficacy	91.0	88.9	82.2	80.1	79.2	75.1

\*Lumen output for CRI80 - 3500K

DFR SMO - Regressed Clear						
Nominal Lumens	1000	1500	2000	2500	3000	3500
Delivered	660	1003	1319	1695	2034	2373
Wattage	8.8	13.7	19.5	25.7	31.2	38.4
Efficacy	75.0	73.2	67.6	66.0	65.2	61.8

\*Lumen output for CRI80 - 3500K

DFR SOL - Regressed Textured						
Nominal Lumens	1000	1500	2000	2500	3000	3500
Delivered	611	929	1222	1571	1885	2199
Wattage	8.8	13.7	19.5	25.7	31.2	38.4
Efficacy	69.4	67.8	62.7	61.1	60.4	57.3

\*Lumen output for CRI80 - 3500K

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

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%	Square	Linear

Lumen Output Multiplier		
CRI	CCT	Multiplier
80	2700K	0.96
	300K	1.00
	3500K	1.00
	4000K	1.01
	5000K	1.07
90	2700K	0.80
	300K	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

## DETERMINING MOUNTING FRAME COMPATIBILITY

Mounting frame must be a Gotham mounting frame series GRS, GRSF, GRSH, AFV, or LGFV. If not, please contact Gotham Technical Support at 800-315-4982 for additional solutions.

### Step 1 – Measure

- Measure the inside diameter of the aperture opening.
- Measure the available plenum depth.

### Step 2 – Verify

- If the measured mounting frame diameter matches and measured plenum depth is greater than listed in Table 1, **then the mounting frame is compatible with Gotham Evo.**

If the frame is not compatible, please contact Gotham Technical Support for more options.

Table 1

	Inside Diameter of Mounting Frame	Minimum Plenum Depth
4" downlight/wallwash	4.87"	6.938"
6" downlight	6.63"	8.500"
	6.87"	8.000"
6" wallwash	6.63"	N/A
	6.87"	8.000"
8" downlight/wallwash	8.18"	9.125"
	8.60"	9.125"

## How to Estimate Delivered Lumens in Emergency Mode

$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

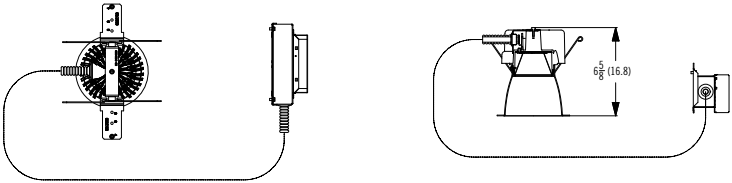
P = Output power of emergency driver. P = 10W for PS1055CP

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

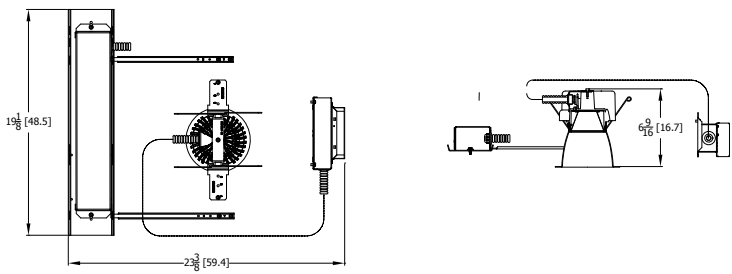
DIMENSIONAL DATA

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

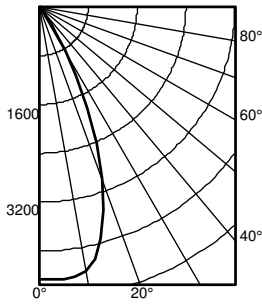


Standard Retrofit with Battery Pack



**EV04SH 35/25 4DFF SMO INPUT WATTS: 37.2W, DELIVERED LUMENS: 2650LM, LPW = 71.2, TEST NO. PT06171309**

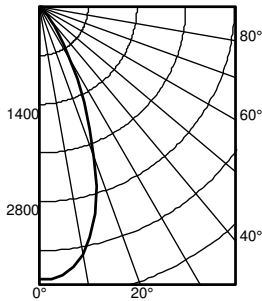
Photometry



Ave	Lumens	Zone	Lumens	% Lamp	pf	pc	80%			20%			50%		
							50%	30%	10%	50%	30%	10%	50%	30%	10%
0	4472	0° - 30°	2318.5	87.5	0		119	119	119	116	116	116	111	111	111
5	4485	0° - 40°	2541.2	95.9	1		112	109	107	109	107	106	105	104	102
15	3917	0° - 60°	2626.8	99.1	2		105	101	98	103	100	97	100	97	95
25	1832	0° - 90°	2649.8	100.0	3		99	95	91	98	94	90	95	92	89
35	297	90° - 180°	0.0	0.0	4		94	89	85	93	88	85	90	87	84
45	86	0° - 180°	2649.8	*100.0	5		89	84	80	88	83	80	86	82	79
55	23	*Efficiency				6		84	79	84	79	75	82	78	75
65	13				7		80	75	72	80	75	71	79	74	71
75	7				8		77	72	68	76	71	68	75	71	68
85	3				9		73	68	65	73	68	65	72	68	64
90	0				10		70	65	62	70	65	62	69	65	62

Initial FC						50% beam - 42.1°		10% beam - 61.8°	
Mounting	Center	Beam	Diameter	FC	Diameter	FC		Diameter	FC
8.0	147.8		4.2	73.9	6.6	14.8			
10.0	79.5		5.8	39.7	9.0	7.9			
12.0	49.6		7.3	24.8	11.4	5.0			
14.0	33.8		8.9	16.9	13.8	3.4			
16.0	24.5		10.4	12.3	16.2	2.5			

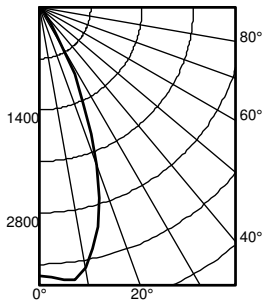
**EV04SH 35/25 4DFF SOL INPUT WATTS: 37.2W, DELIVERED LUMENS: 2516LM, LPW = 67.6, TEST NO. PT06171308**



Ave	Lumens	Zone	Lumens	% Lamp	pf	pc	80%			20%			50%		
							50%	30%	10%	50%	30%	10%	50%	30%	10%
0	3917	0° - 30°	1892.4	75.2	0		119	119	119	116	116	116	111	111	111
5	3865	0° - 40°	2202.3	87.5	1		110	108	105	108	106	104	104	102	100
15	3076	0° - 60°	2412.1	95.9	2		102	98	95	101	97	94	97	94	92
25	1518	0° - 90°	2516.2	100.0	3		96	90	86	94	89	86	92	88	84
35	468	90° - 180°	0.0	0.0	4		90	84	80	88	83	79	86	82	78
45	166	0° - 180°	2516.2	*100.0	5		84	78	74	83	78	74	81	77	73
55	83	*Efficiency				6		79	74	69	79	73	69	77	72
65	57				7		75	69	65	75	69	65	73	68	65
75	36				8		71	66	62	71	65	61	70	65	61
85	9				9		68	62	58	67	62	58	66	61	58
90	0				10		65	59	55	64	59	55	63	59	55

Initial FC						50% beam - 39.5°		10% beam - 64.7°	
Mounting	Center	Beam	Diameter	FC	Diameter	FC		Diameter	FC
8.0	129.5		4.0	64.7	7.0	13.0			
10.0	69.6		5.4	34.8	9.5	7.0			
12.0	43.4		6.8	21.7	12.0	4.3			
14.0	29.6		8.3	14.8	14.6	3.0			
16.0	21.5		9.7	10.7	17.1	2.1			

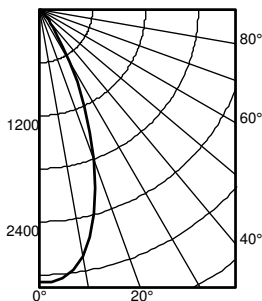
**EV04SH 35/25 4DFR SMO INPUT WATTS: 37.2W, DELIVERED LUMENS: 2101LM, LPW = 56.5, TEST NO. PT06171307**



Ave	Lumens	Zone	Lumens	% Lamp	pf	pc	80%			20%			50%		
							50%	30%	10%	50%	30%	10%	50%	30%	10%
0	3649	0° - 30°	1837.9	87.5	0		119	119	119	116	116	116	111	111	111
5	3734	0° - 40°	2020.3	96.2	1		112	109	107	110	108	106	105	104	102
15	3086	0° - 60°	2086.5	99.3	2		105	101	98	103	100	97	100	98	95
25	1425	0° - 90°	2100.9	100.0	3		99	95	91	98	94	91	95	92	89
35	245	90° - 180°	0.0	0.0	4		94	89	85	93	88	85	91	87	84
45	70	0° - 180°	2100.9	*100.0	5		89	84	80	88	83	80	86	82	79
55	16	*Efficiency				6		85	80	76	84	79	76	83	78
65	9				7		81	75	72	80	75	72	79	74	71
75	4				8		77	72	68	76	72	68	75	71	68
85	0				9		74	69	65	73	68	65	72	68	65
90	0				10		71	66	62	70	65	62	69	65	62

Initial FC						50% beam - 40.9°		10% beam - 61.9°	
Mounting	Center	Beam	Diameter	FC	Diameter	FC		Diameter	FC
8.0	120.6		4.1	60.3	6.6	12.1			
10.0	64.9		5.6	32.4	9.0	6.5			
12.0	40.4		7.1	20.2	11.4	4.0			
14.0	27.6		8.6	13.8	13.8	2.8			
16.0	20.0		10.1	10.0	16.2	2.0			

**EV04SH 35/25 4DFR SOL INPUT WATTS: 37.2W, DELIVERED LUMENS: 1919LM, LPW = 51.6, TEST NO. PT06171306**



Ave	Lumens	Zone	Lumens	% Lamp	pf	pc	80%			20%			50%		
							50%	30%	10%	50%	30%	10%	50%	30%	10%
0	3089	0° - 30°	1485.5	77.4	0		119	119	119	116	116	116	111	111	111
5	3047	0° - 40°	1721.3	89.7	1		111	108	106	109	106	104	105	103	101
15	2395	0° - 60°	1866.4	97.2	2		103	99	96	101	98	95	98	95	93
25	1204	0° - 90°	1919.2	100.0	3		96	92	88	95	91	87	92	89	86
35	354	90° - 180°	0.0	0.0	4		91	85	81	89	84	81	87	83	80
45	117	0° - 180°	1919.2	*100.0	5		85	80	76	84	79	75	83	78	75
55	55	*Efficiency				6		81	75	71	80	74	71	74	70
65	35				7		76	71	67	76	70	66	74	70	66
75	15				8		72	67	63	72	67	63	71	66	63
85	2				9		69	63	60	69	63	60	68	63	59
90	0				10		66	60	57	65	60	57	65	60	56

Initial FC						50% beam - 39.3°		10% beam - 64.5°	
Mounting	Center	Beam	Diameter	FC	Diameter	FC		Diameter	FC
8.0	102.1		3.9	51.0	6.9	10.2			
10.0	54.9		5.4	27.5	9.5	5.5			
12.0	34.2		6.8	17.1	12.0	3.4			
14.0	23.4		8.2	11.7	14.5	2.3			
16.0	16.9		9.7	8.5	17.0	1.7			

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

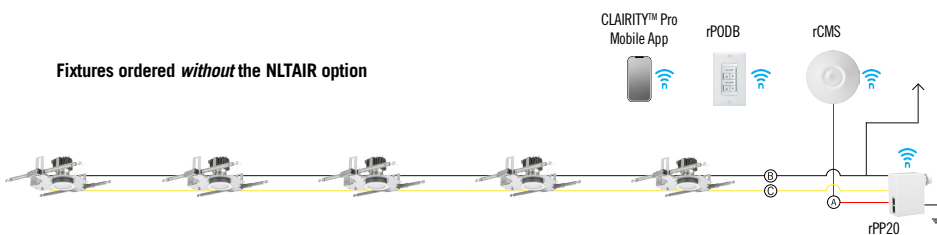
#### nLight® AIR Control Accessories (cont.)

##### Occupancy Sensors (PIR/dual tech)

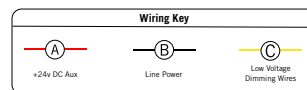
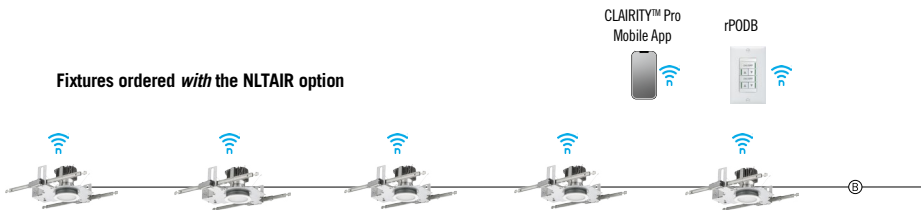
Model Number	
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

#### Possibilities for nLight® AIR

##### Fixtures ordered *without* the NLTAIR option



##### Fixtures ordered *with* the NLTAIR option



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
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#### nLight® Wired Control Accessories (cont.)

##### Occupancy Sensors (PIR/dual tech)

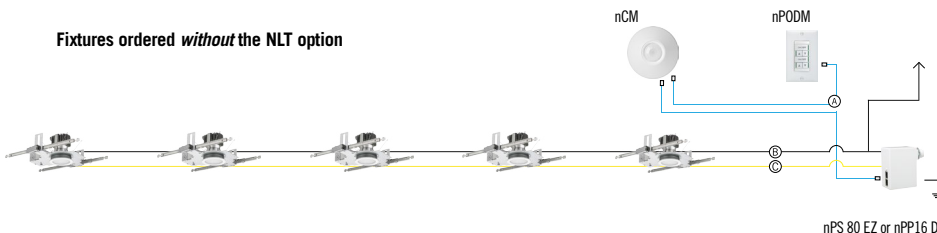
Model Number	
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX

##### Cat-5 Cables (plenum rated)

10', CAT5	CAT5 10FT J1
15', CAT5	CAT5 15FT J1

#### Possibilities for nLight® wired

##### Fixtures ordered *without* the NLT option



##### Fixtures ordered *with* the NLT option

