



General Illumination Retrofit Downlight

8"

Feature Set

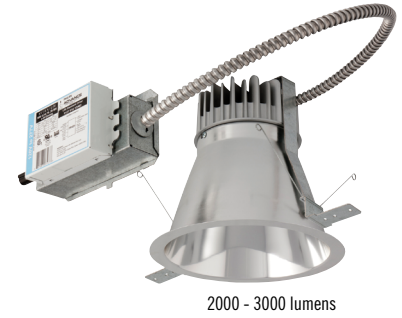
- Bounding Ray™ optical design
- Unitized optics mechanically attach the light engine to the lower reflector for complete optical alignment.
- 45° cutoff to source and source image
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 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

Distribution



Superior Performance

Nominal Lumens	2000	2500	3000
Delivered Lumens	2,287	2,964	3,398
Wattage	31.6	41.1	47.1
Efficacy	72.5	72	72.2



2000 - 3000 lumens

Coordinated Apertures | Multiple Layers of Light



General Illumination Layer | EVO



High Center Beam Layer | Incito



EVO + Incito — Multiple Layers of Light

Core



Downlight



Adjustable



Open Wallwash



Lensed Wallwash



Cylinder



Pinhole



Bevel



Hyperbolic

Healthcare



MRI



Surgical Suite



Patient Room

Special Applications



Dynamic



Food Service



Vandal/Tamper



Clean Room



Shower



Steam Room



A+ Capable options indicated by this color background.

Luminaire Type:

Catalog Number:

EXAMPLE: EV08R 35/30 AR MWD LSS 277 EZ1

Series	Color Temperature	Nominal Lumen Values	Reflector & Flange Color	Distribution	Finish	Voltage
EV08R	27/ 2700 K 30/ 3000 K 35/ 3500 K 40/ 4000 K	20 2000 lumens 25 2500 lumens 30 3000 lumens	AR Clear PR Pewter WTR Wheat GR Gold WR ¹ White BR ¹ Black WRAMF ¹ White Anti-microbial	VND Very Narrow (0.5 s/mh) ND Narrow (0.7 s/mh) 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	120 277 347 ^{2,3}

Driver ⁴	Control Interface	Options
GZ10 0-10V driver dims to 10% GZ1 0-10V driver dims to 1% EZ10 eldoLED 0-10V ECOdrive. Linear dimming to 10% min. EZ1 eldoLED 0-10V ECOdrive. Linear dimming to 1% min. EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. EDAB⁵ eldoLED SOLOdrive DALI. Logarithmic dimming to <1%. EDXB⁵ eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Includes termination resistor. ECOD⁵ Lutron Ecosystem digital Hi-Lume 1% soft-on, fade to black. Maximum 2500 lumens.	NLT⁶ nLight® dimming pack controls NLTER^{2,6,9} nLight® dimming pack controls emergency circuit NLTAIR2¹¹ nLight® AIR enabled NLTAIRER2^{2,9,11} nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit EXA1 XPoint Wireless, eldoLED 0-10V ECOdrive. Linear dimming to 1%. Refer to XPoint tech sheet. EXAB XPoint Wireless, eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. Refer to XPoint tech sheet.	SF Single fuse. Specify 120V or 277V. TRW⁷ White painted flange TRBL⁸ Black painted flange EL Emergency battery pack, 10W, with integral test switch ELR Emergency battery pack, 10W, with remote test switch ELSD Emergency battery pack, 10W, with self-diagnostics, integral test switch ELRSD Emergency battery pack, 10W, with self-diagnostics, remote test switch E10WCP Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch E10WCPR Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch N80¹⁰ nLight® Lumen Compensation 90CRI High CRI (90+) RRL RELOC®-ready Luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Available only with RRLA, RRLB, RRLAE, and RRLC12S. Refer to RRL spec sheet on www.acuitybrands.com for RELOC product specifications. Above ceiling access required.

ACCESSORIES — order as separate catalog numbers (shipped separately)

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 ISD-BC .

ORDERING NOTES

- Not available with finishes.
- Not available with EL/ELR options.
- Supplied with factory installed step down transformer.
- Refer to [TECH-240](#) for compatible dimmers.
- Not available with nLight® and XPoint options.
- Must specify voltage.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not available with WR (white reflector).
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not available with BR (black reflector).
- For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- Fixture begins at 80% light level. Must be specified with eldoLED drivers and NLT or NLTER.
- Not available DALI or DMX drivers. Not available with CP or N80 options. Not recommended for metal ceiling installations.

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 ± 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

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.

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 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 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

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
	3000K	1.00
	3500K	1.00
	4000K	1.01
90	2700K	0.80
	3000K	0.83
	3500K	0.85
	4000K	0.87

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

Distributions

Nomenclature	Beam Angle	Field Angle
VND	30	64
ND	44	69
MD	54	82
MWD	67	89
WD	71	92

Driver Control Provided (note: 347V/UVOLT versions provided with 347 option selected)

Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIRER2
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

How to Estimate Delivered Lumens in Emergency Mode

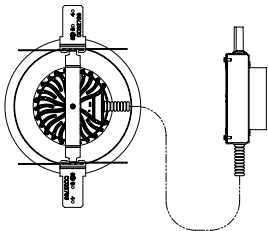
$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

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

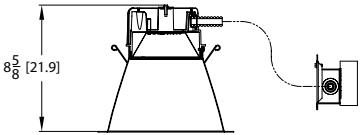
LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

DIMENSIONAL DATA

Aperture: 7-7/8 (20.1)
Ceiling Opening: 8-7/8 (21.5)
Overlap Trim: 9-1/4 (23.5)

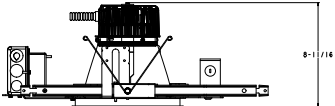
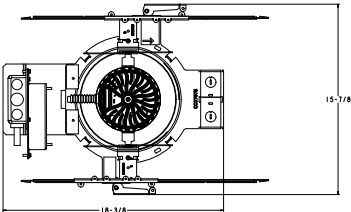


Standard

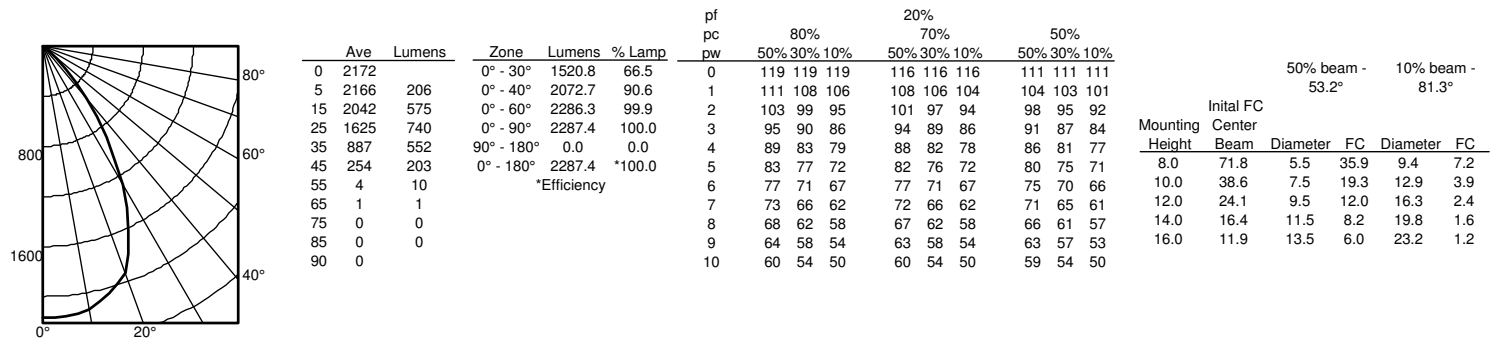


Aperture: 7-7/8 (20.1)
Ceiling Opening: 8-7/8 (21.5)
Overlap Trim: 9-1/4 (23.5)

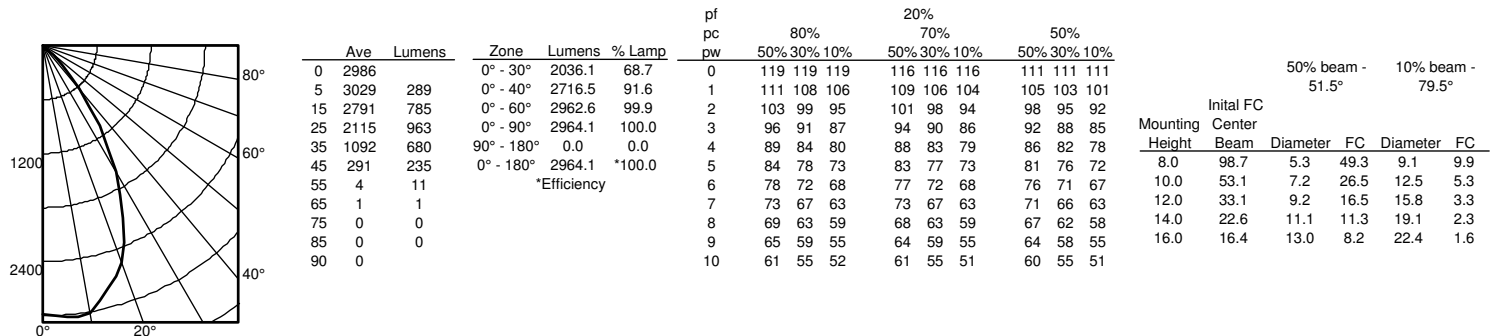
Drive Open Frame CP



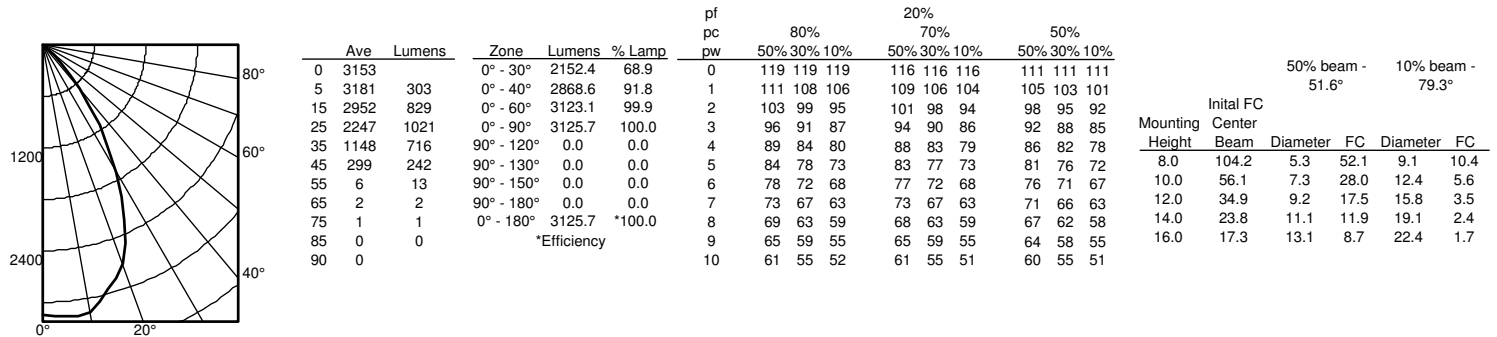
EVO8R 30/20 AR MWD LS INPUT WATTS: 31.5, DELIVERED LUMENS: 2287.4, LPW= 72.6, 1 S/MH, TEST NO. LTL27655P301



EVO8R 30/25 AR MWD LS INPUT WATTS: 41, DELIVERED LUMENS: 2964, LPW = 72.3, 0.98S/MH, TEST NO. LTL27654P200



EVO8R 30/30 AR MWD LS INPUT WATTS: 42.3, DELIVERED LUMENS: 3125.8, LPW=73.8, 0.99 S/MH, TEST NO. 27848P202



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

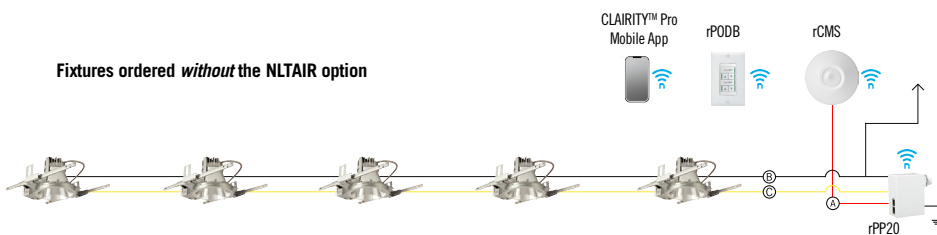
nLight® AIR Control Accessories (cont.)

Occupancy Sensors (PIR/dual tech)

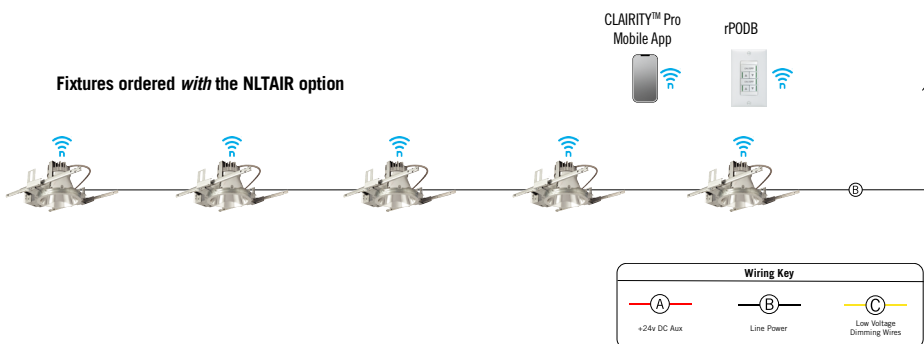
Model Number	
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

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)

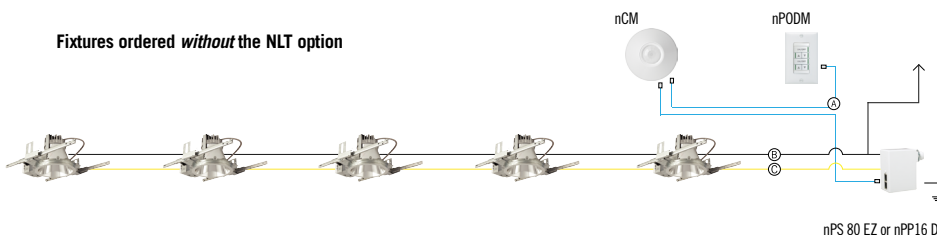
Model Number	
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX

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

