

OVERVIEW

General Illumination Round Downlight

2"



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
- ENERGY STAR® Certified product

Distribution



Superior Performance

Nominal lumens	250	500	750	1000	1500	2000
Delivered	265	540	802	1073	1537	2094
Wattage	3.4	6.3	9.7	12.7	21.2	31.7
Efficacy	78	85	83	84	73	66

*Based on 3500K 80CRI 15D AR LSS



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

COMPLEMENTARY PRODUCTS

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		

ds Design Select options indicated by this color background.

Luminaire Type:

Catalog Number:

EXAMPLE: EV02 35/20 AR LSS ND MVOLT UGZ

Series	Color Temperature	Lumens	Reflector Color	Flange Type	Reflector Finish	Distribution
EV02 EVO 2in Round 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/ 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	HA0 ⁸ High ambient (40°C)
		NLTAIREM2 nLight [®] AIR dimming pack for fixtures on emergency circuit	N80 ⁹ nLight Lumen Compensation
			TRW ¹⁰ White painted flange
			TRBL ¹¹ Black painted flange

ACCESSORIES — order as separate catalog numbers (shipped separately)

HS258	2-5/8" Hole saw
HS234FL	Hole saw for flangeless trim option
SDT 347/120 75VA	347V/120V, 75VA step down transformer. Must be remote mounted.

ORDERING NOTES

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

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 90°C. 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. ENERGY STAR® Certified product. 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. 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

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 60,000 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.

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 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.

Tables of Use

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 (HA0)	18	9	3

Flangeless

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.



Partially finished mud ring, showing cross-section detail.



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



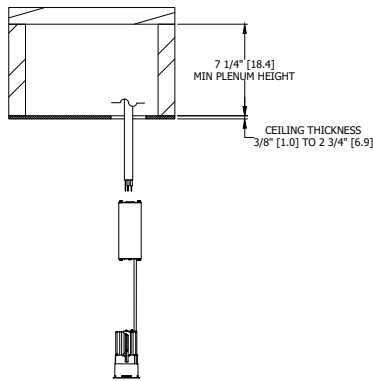
EVO with flangeless trim

DIMENSIONAL DATA

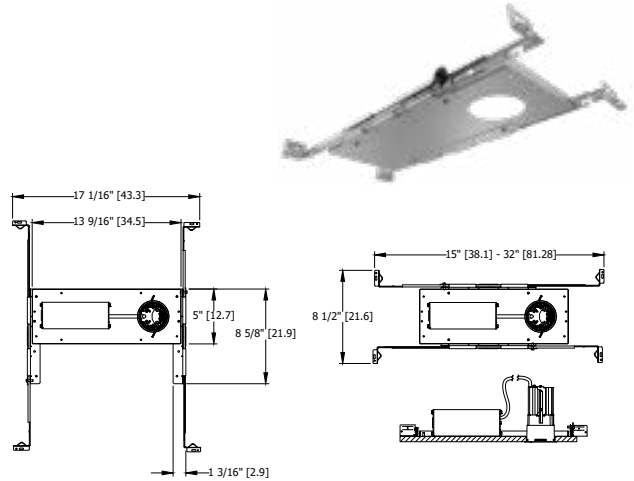
*Dimensions in inches [centimeters]

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

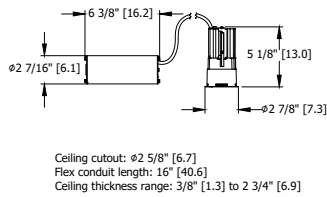
Recessed Application - Minimum Clearance Requirements



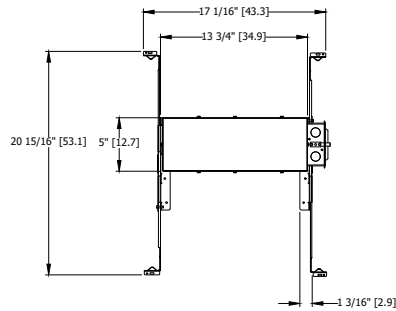
Structural Reinforcement Pan



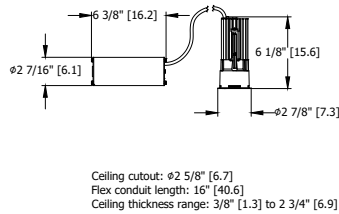
1000 Lumen and Below Install-from-Below Construction



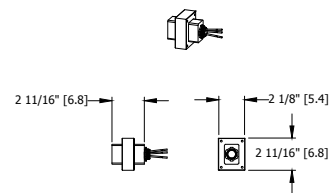
IC / Airtight Housing / Chicago Plenum Construction



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



347V Transformer

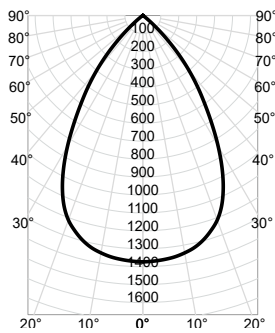


347 Transformer:
 Install to accessible
 junction box by others

Photometry

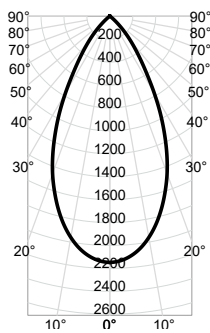
CONSULT WWW.GOTHAMLIGHTING.COM FOR ADDITIONAL PHOTOMETRY

EV02 35/15 AR LSS MWD Input Watts: 21.2, Delivered Lumens: 1537, LPW: 72.5, S/MH: 1.02, Test No: 19-649-02P65



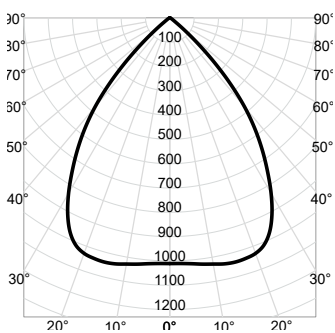
CP Summary				Zonal Lumen Summary				Coefficients of Utilization								Cone of Light			Luminance (cd/sq.m)	
								pf	20%				50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
								pc	70%				30%							
								pw	50%	30%	10%	50%	30%	10%	50%	30%	10%			
0°	1,373	0° - 30°	973	63%	0	119	119	119	116	116	116	111	111	111	6.0	38.1	7.8	0°	521,285	
5°	1,365	0° - 40°	1,350	88%	1	110	108	105	108	106	104	104	102	101	8.0	21.5	10.5	45°	110,600	
15°	1,297	0° - 60°	1,532	100%	2	102	98	94	100	97	93	97	94	91	10.0	13.7	13.1	55°	9,597	
25°	1,061	0° - 90°	1,537	100%	3	95	89	85	93	88	85	91	87	83	12.0	9.5	15.7	65°	3,234	
35°	603	90° - 180°	0	0%	4	88	82	78	87	81	77	85	80	76	14.0	7.0	18.3	75°	1,760	
45°	206	0° - 180°	1,537	100%	5	82	76	71	81	75	71	79	74	70				85°	871	
55°	15					6	76	70	65	75	70	65	74	69				Beam Angle: 66.3°		
65°	4					7	71	65	60	71	65	60	69	64				Field Angle: 94.1°		
75°	1					8	67	60	56	66	60	56	65	60						
85°	0					9	63	56	52	62	56	52	61	56						
90°	0					10	59	53	49	58	53	49	58	52						

EV02 35/15 AR LSS ND Input Watts: 21.2, Delivered Lumens: 1621, LPW: 76.5, S/MH: 0.80, Test No: 19-649-01P65



CP Summary				Zonal Lumen Summary				Coefficients of Utilization								Cone of Light			Luminance (cd/sq.m)	
								pf	20%				50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
								pc	70%				30%							
								pw	50%	30%	10%	50%	30%	10%	50%	30%	10%			
0°	2,149	0° - 30°	1,188	73%	0	119	119	119	116	116	116	111	111	111	6.0	59.7	5.8	0°	815,772	
5°	2,099	0° - 40°	1,494	92%	1	111	109	106	109	107	105	105	103	101	8.0	33.6	7.7	45°	74,252	
15°	1,739	0° - 60°	1,617	100%	2	103	100	96	102	98	95	99	96	93	10.0	21.5	9.6	55°	6,420	
25°	1,126	0° - 90°	1,621	100%	3	97	92	88	95	91	87	93	89	86	12.0	14.9	11.6	65°	2,156	
35°	478	90° - 180°	0	0%	4	91	85	81	89	84	81	87	83	80	14.0	11.0	13.5	75°	1,173	
45°	138	0° - 180°	1,621	100%	5	85	79	75	84	79	75	82	78	74				85°	871	
55°	10					6	80	74	70	79	74	70	78	73				Beam Angle: 51.5°		
65°	2					7	75	69	65	75	69	65	73	68				Field Angle: 84.5°		
75°	1					8	71	65	61	71	65	61	70	65						
85°	0					9	67	62	58	67	61	58	66	61						
90°	0					10	64	58	54	63	58	54	63	58						

EV02 35/15 AR LSS WD Input Watts: 21.2, Delivered Lumens: 1472, LPW: 69.4, S/MH: 1.19, Test No: 19-649-03P65



CP Summary				Zonal Lumen Summary				Coefficients of Utilization								Cone of Light			Luminance (cd/sq.m)	
								pf	20%				50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
								pc	70%				30%							
								pw	50%	30%	10%	50%	30%	10%	50%	30%	10%			
0°	1,011	0° - 30°	832	57%	0	119	119	119	116	116	116	111	111	111	6.0	28.1	9.7	0°	383,741	
5°	1,015	0° - 40°	1,241	84%	1	110	107	105	108	105	103	104	102	100	8.0	15.8	12.9	45°	137,982	
15°	1,040	0° - 60°	1,465	100%	2	101	97	93	100	96	92	96	93	90	10.0	10.1	16.1	55°	12,774	
25°	971	0° - 90°	1,472	100%	3	93	88	84	92	87	83	89	85	81	12.0	7.0	19.4	65°	4,312	
35°	662	90° - 180°	0	0%	4	86	80	75	85	79	75	83	78	74	14.0	5.2	22.6	75°	2,200	
45°	257	0° - 180°	1,472	100%	5	80	73	68	79	73	68	77	72	68				85°	1,307	
55°	19					6	74	67	63	73	67	62	72	66				Beam Angle: 77.8°		
65°	5					7	69	62	57	68	62	57	67	61				Field Angle: 98.3°		
75°	2					8	64	57	53	63	57	53	62	56						
85°	0					9	60	53	49	59	53	49	58	52						
90°	0					10	56	49	45	55	49	45	54	49						

Lumen Output Multiplier		
CRI	CCT	Multiplier
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

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

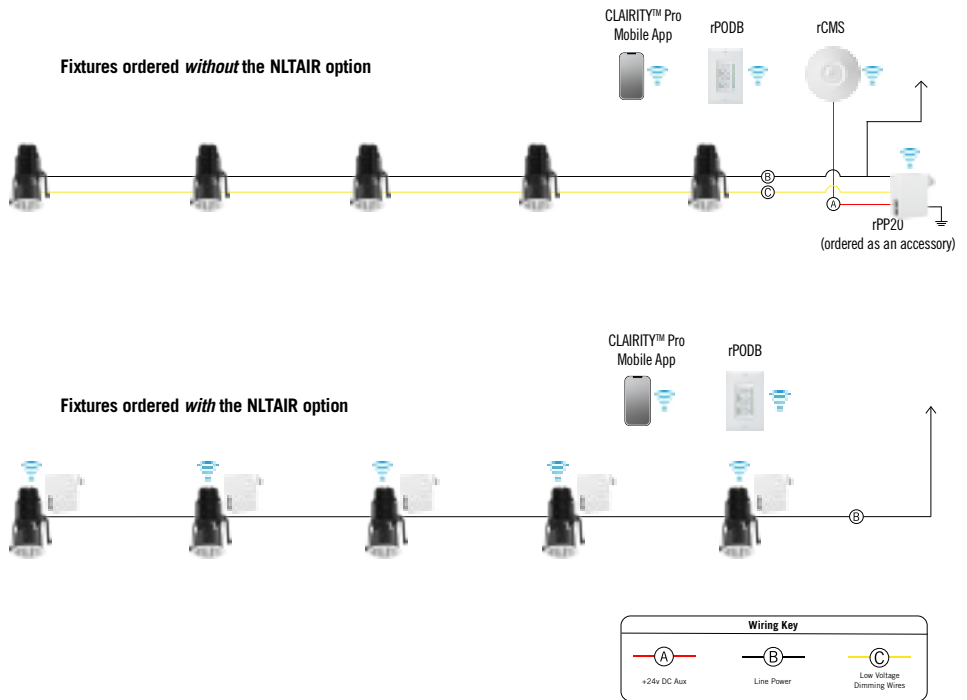
Order as separate catalog number. Visit [nLight AIR](#).

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



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.

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
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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

