

Multiple Layers of Light















# **General Illumination 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 MacAdam ellipse; 85 CRI typical, 90+ CRI optional
- IP66 rated room-side, Fixtures are wet location, covered ceiling
- · Anti-microbial paint finish
- · Non-conductive dead-front trim
- · Suitable for steam room application
- UGR of zero for fixtures aimed at nadir with a cut-off equal to or less than 60deg per CIE 117-1995 Discomfort Glare in Interior Lighting. UGR FAQ



#### **Distribution**



## **Superior Perfomance**

Nominal Lumens	1000	1500	2000	2500
Delivered	843	1281	1684	2165
Wattage	8.8	13.7	19.5	25.7
Efficacy	95.8	93.5	86.4	84.2

<sup>\*</sup>Lumen output for 80CRI - 3500K

## **Coordinated Apertures | Multiple Layers of Light**





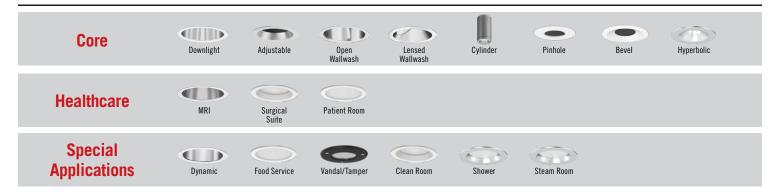
General Illumination Layer I EVO







EVO + Incito — Multiple Layers of Light





Luminaire Type: Catalog Number:

#### **EXAMPLE: EV04SH 35/20 DFFAMF SOL MVOLT EZ1**

Series	Color Temperature	Nominal Lumen Values	Lens Setting	Lens	Voltage
EV04SH	27/ 2700 K 30/ 3000 K 35/ 3500 K 40/ 4000 K 50/ 5000 K	10 1000 lumens 15 1500 lumens 20 2000 lumens 25 2500 lumens 30 3000 lumens 35 3500 lumens 40 4000 lumens 45 4500 lumens	DFR Regressed lensed white painted trim DFFB Flush lensed white painted trim DFFBR Regressed lensed black painted trim DFFAMF Regressed lensed trim with anti-microbial finish  DFFAMF Flush lensed trim with anti-microbial finish	SOL Textured Lens SMO Smooth Clear Lens	MVOLT 120 277

Driver <sup>1</sup>		Controls	Interface	Emergency		Options	:
EZ1 EZB EDAB	eldoLED 0-10V ECOdrive. Linear dimming to 1% min. eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.	NLT <sup>2</sup> NLTER <sup>2,3</sup>	nLight® dimming pack controls 0-10V eldoLED drivers. nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit.	(blank) ELR <sup>4</sup> E10WCPR <sup>4</sup>	no emergency options Emergency battery pack, 10W, with remote test switch. Emergency battery pack, 10W Constant Power, CA Title 20 com- pliant with remote test switch	SF 90CRI CP	Single fuse. Specify 120V or 277V. High CRI (90+). Chicago Plenum
				BGTD	Bodine generator transfer device. 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 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.

0-10V wallbox dimmer. Refer to ISD-BC.

RK2 SDT 347/120 75VA U 347V step-down transformer mounted in box installed by others up to 5000lm RK2 SDT 347277120 395VA AD U 347V step down transformer mounted in box installed by others 6000-12,000lm

## **ORDERING NOTES**

- Refer to TECH-240 for compatible dimmers.
- Specify Voltage.
- 3. For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- 11" of plenum depth or top access required for battery pack maintenance. Not available with CP option.





#### **Optical Assemby**

Fully serviceable and upgradeable lensed LED light engine, both the driver and light engine are suitable for field maintenance and are serviceable from above or below the ceiling.

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

#### Flectrical

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. All drivers are ROHS compliant.

#### 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

Luminaire housing is constructed of 20-gauge galvanized steel and has pre-installed telescopic mounting bars with maximum 26" and minimum 15" extension and 4" vertical adjustment.

Luminaires are suitable for installation in ceilings up to  $1\frac{1}{2}$ " thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 5").

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.

#### **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 <a href="https://www.acuitybrands.com/resources/buy-american">https://www.acuitybrands.com/resources/buy-american</a> 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: <a href="https://www.acuitybrands.com/support/warranty/terms-and-conditions">www.acuitybrands.com/support/warranty/terms-and-conditions</a>

#### 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  $^{\circ}$ C.

## \*\* 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

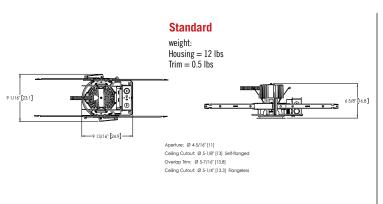


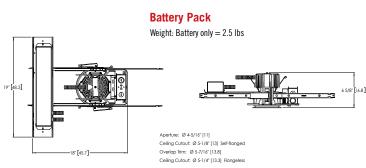
Aperture: 4-5/16" (11)

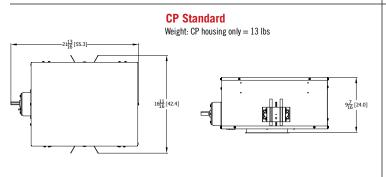
Ceiling Opening: 5-1/8" (13) self-flanged

Overlap trim: 5-7/16" (13.8)

5-1/4" (13.3) flangeless







EVO - eldoLED Driver Default Dimming Curve							
Nomenclature Min Dimming Driver Dim Curve Control Dim Cur							
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				

	Driver		Provided ersions provided with 1 selected)
Nomenclature	Description	NLT	NLTER
GZ10	0-10V driver dims to 10%	nPP16 D EFP	nPP16 D ER EFP
GZ1	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP
EZ1	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER
EZB	eldoLED 0-10V SOLOdrive	nPS 80 EZ	nPS 80 EZ ER

## How to Estimate Delivered Lumens in Emergency Mode

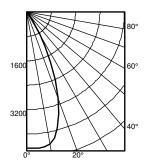
#### Delivered Lumens = 1.25 x P x LPW

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.



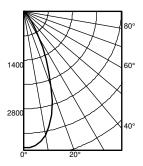
## EV04SH 35/25 4DFF SM0 INPUT WATTS: 37.2W, DELIVERED LUMENS: 2650LM, LPW = 71.2, TEST NO. PT06171309



	Ave	Lumens	Zone	Lumens	% Lamp
0	4472		0° - 30°	2318.5	87.5
5	4485	425	0° - 40°	2541.2	95.9
15	3917	1065	0° - 60°	2626.8	99.1
25	1832	828	0° - 90°	2649.8	100.0
35	297	223	90° - 180°	0.0	0.0
45	86	64	0° - 180°	2649.8	*100.0
55	23	21	*	Efficiency	
65	13	13			
75	7	7			
85	3	3			

			50% beam - 42.1°		10% be 61.8	
		Inital FC				
-	Mounting	Center				
	Height	Beam	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

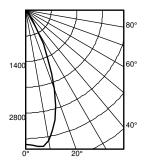


	Ave	Lumens		Zone	Lumens	% Lam
0	3917			0° - 30°	1892.4	75.2
5	3865	361		0° - 40°	2202.3	87.5
15	3076	838		0° - 60°	2412.1	95.9
25	1518	694		0° - 90°	2516.2	100.0
35	468	310	9	0° - 180°	0.0	0.0
45	166	134	(	0° - 180°	2516.2	*100.0
55	83	76		*	Efficiency	
65	57	56				
75	36	37				
85	9	11				

		39.5	5°	64.7	70
	Inital FC				
Mounting	Center				
Height	Beam	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

50% beam - 10% beam -

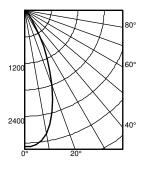
## EVO4SH 35/25 4DFR SMO INPUT WATTS: 37.2W, DELIVERED LUMENS: 2101LM, LPW =56.5, TEST NO. PT06171307



	Ave	Lumens	Zone	Lumens	% Lamp
0	3649		0° - 30°	1837.9	87.5
5	3734	353	0° - 40°	2020.3	96.2
15	3086	838	0° - 60°	2086.5	99.3
25	1425	647	0° - 90°	2100.9	100.0
35	245	182	90° - 180°	0.0	0.0
45	70	51	0° - 180°	2100.9	*100.0
55	16	15	*	Efficiency	
65	9	9			
75	4	5			
85	0	0			
00					

		40.8	,	61.9	
	Inital FC				
Mounting	Center				
Height	Beam	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	% Lan
0	3089		0° - 30°	1485.5	77.4
5	3047	284	0° - 40°	1721.3	89.7
15	2395	654	0° - 60°	1866.4	97.2
25	1204	548	0° - 90°	1919.2	100.0
35	354	236	90° - 180°	0.0	0.0
45	117	94	0° - 180°	1919.2	*100.0
55	55	51	*	Efficiency	
65	35	34			
75	15	16			
85	2	2			

		39.3		64.5	
	Inital FC	00.0	,	04.0	
Mounting	Center				
Height	Beam	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





CRI

80

90

CCT/CRI Multiplier Table

Multiplier

0.96

1.00

1.00

1.01

1.07

0.80

0.83

0.85

0.87

0.91

CCT

2700K

300K

3500K

4000K

5000K

2700K

300K

3500K

4000K

5000K

D	FF SMO - F	lush Clear		
Nominal Lumens	1000	1500	2000	2500
Delivered	843	1281	1684	2165
Wattage	8.8	13.7	19.5	25.7
Efficacy	95.8	93.5	86.4	84.2

<sup>\*</sup>Lumen output for CRI80 - 3500K

DFF SOL - Flush Textured				
Nominal Lumens	1000	1500	2000	2500
Delivered	801	1218	1602	2059
Wattage	8.8	13.7	19.5	25.7
Efficacy	91.0	88.9	82.2	80.1

<sup>\*</sup>Lumen output for CRI80 - 3500K

DFR	SMO - Reg	gressed Cle	ear	
<b>Nominal Lumens</b>	1000	1500	2000	2500
Delivered	660	1003	1319	1695
Wattage	8.8	13.7	19.5	25.7
Efficacy	75.0	73.2	67.6	66.0

<sup>\*</sup>Lumen output for CRI80 - 3500K

DFR SOL - Regressed Textured				
Nominal Lumens	1000	1500	2000	2500
Delivered	611	929	1222	1571
Wattage	8.8	13.7	19.5	25.7
Efficacy	69.4	67.8	62.7	61.1

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.

**Photocell Controls** 

Dimming

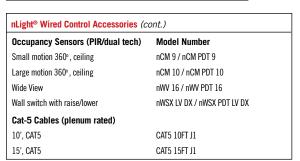
nlight® Wired Central Assessaries

## Possibilites for nLight® wired

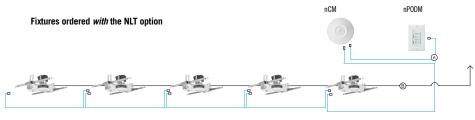


nPS 80 EZ or nPP16 D

Wall Switches	<b>Model Number</b>
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)



nCM ADCX







<sup>\*</sup>Lumen output for CRI80 - 3500K