



General Illumination Square Cleanroom Downlight

6"

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
- ISO 5 Class 100
- Anti-microbial paint finish, optional
- 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](#)

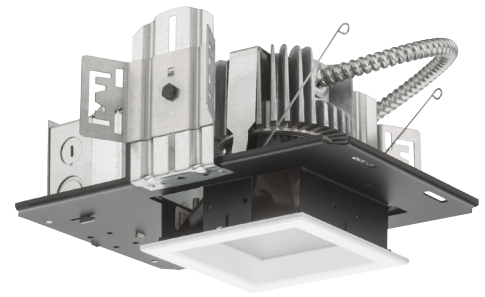
Distribution



Superior Performance (Flush, Clear Lens)

Nominal Lumens	1000	1500	2000	2500
Delivered	870	1292	1754	2219
Wattage	9.6	14.7	19.7	24.7
Efficacy	90.6	87.9	89.0	89.8

*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

Core



Downlight



Adjustable



Open Wallwash



Lensed Wallwash



Cylinder



Pinhole



Bevel



Hyperbolic

Healthcare



MRI



Surgical Suite



Patient Room

Special Applications



Dynamic



Food Service



Vandal/Tamper



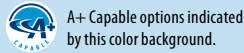
Clean Room



Shower



Steam Room



Luminaire Type:

Catalog Number:

EXAMPLE: EV06SQCR 35/20 DFRAMF SOL MVOLT EZ1

Series	Color Temperature	Nominal Lumen Values	Lens Setting	Lens	Voltage
EV06SQCR	27/ 2700 K	10 1000 lumens	DFR Regressed lensed white painted trim	SOL Textured Lens	MVOLT
	30/ 3000 K	15 1500 lumens	DFF Flush lensed white painted trim	SMO Smooth Clear Lens	120
	35/ 3500 K	20 2000 lumens	DFRBR Regressed lensed black painted trim		277
	40/ 4000 K	25 2500 lumens	DFFBR Flush lensed black painted trim		
	50/ 5000 K		DFRAMF Regressed lensed trim with anti-microbial finish		
			DFFAMF Flush lensed trim with anti-microbial finish		

Driver ¹	Control Interface	Emergency	Options
EZ1 eldoLED 0-10V ECOdrive. Linear dimming to 1% min.	NLT ² nLight™ dimming pack controls	(blank) no emergency option	SF Single fuse. Specify 120V or 277V.
EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	NLTER ^{2,3} nLight™ dimming pack controls emergency circuit	ELR ⁴ Emergency battery pack, 10W, with remote test switch.	90CRI High CRI (90+).
EDAB eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.		E10WCPR ⁴ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch	CP Chicago Plenum. Specify 120V or 277V.
		BGTD Bodine generator transfer device. Specify 120V or 277V.	

ACCESSORIES — order as separate catalog numbers (shipped separately)

ISD BC 0-10V wallbox dimmer. Refer to [ISD-BC](#).

ORDERING NOTES

1. Refer to [TECH-240](#) for compatible dimmers.
2. Specify voltage.
3. For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
4. Not available with CP option.

Optical Assembly

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.

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. 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%.

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 shall be constructed of 16-gauge galvanized steel and have preinstalled telescopic mounting bars with maximum 32" and minimum 15" extension and 4" vertical adjustment.

luminaires shall be suitable for installation in ceilings up to 1½" thick.

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.

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 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

*Dimensions in inches [centimeters]

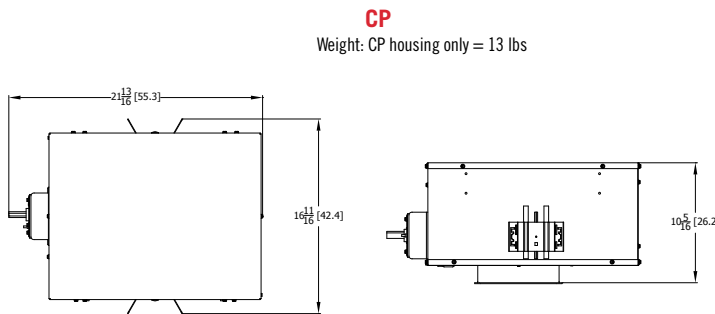
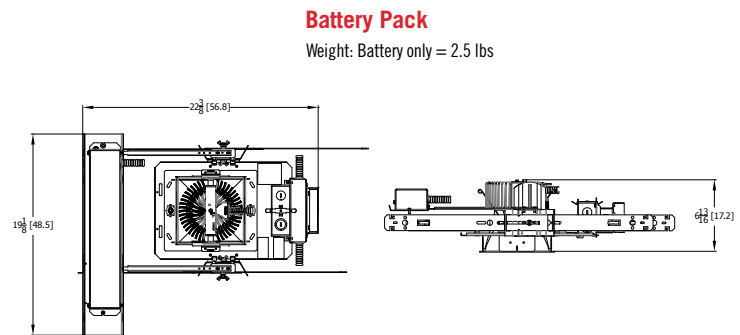
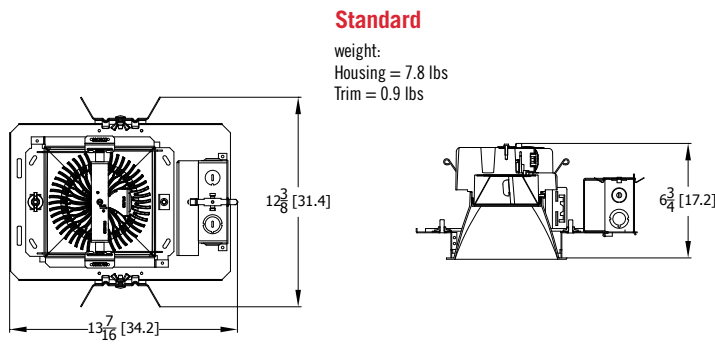
Aperture: 6 1/4" [15.9]

Ceiling Opening: 7 1/8" [18.1] self-flanged

Overlap Trim: 7 1/2" [19.1]

7 1/4" [18.4] flangeless

DIMENSIONAL DATA



EVO - eldoLED Driver Default Dimming Curve			
Nomenclature	Min Dimming	Driver Dim Curve	Control Dim Curve
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		Control Provided (note: 347V/UVOLT versions provided with 347 option 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

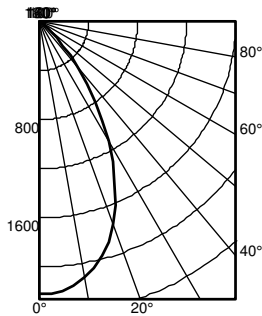
Delivered Lumens = 1.25 x P x LPW

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.

EVO6SQCR 35/25 DFF SMO 80CRI INPUT WATTS: 24.7W, DELIVERED LUMENS: 2219.5LM, LPW = 90, 0.87 S/MH, TEST NO: LTL29890P89

Photometry

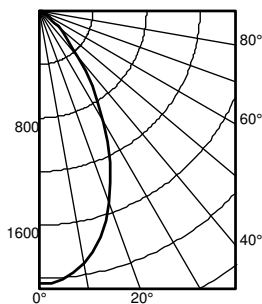


Ave	Lumens	Zone	Lumens	% Lamp
0	2222	0° - 30°	1420.1	64.0
5	2200	0° - 40°	1915.2	86.3
15	1980	0° - 60°	2192.7	98.8
25	1456	0° - 90°	2218.6	100.0
35	795	90° - 120°	0.0	0.0
45	274	90° - 130°	0.0	0.0
55	56	90° - 150°	0.3	0.0
65	16	90° - 180°	0.9	0.0
75	7	0° - 180°	2219.5	*100.0
85	2			
90	0			

*Efficiency

Mounting Height	Initial Center Beam	50% beam - Diameter	50% beam - FC	10% beam - Diameter	10% beam - FC
8.0	73.5	5.0	36.7	9.3	7.3
10.0	39.5	6.9	19.7	12.6	3.9
12.0	24.6	8.7	12.3	16.0	2.5
14.0	16.8	10.5	8.4	19.4	1.7
16.0	12.2	12.4	6.1	22.7	1.2

EVO6SQCR 35/25 DFF SOL 80CRI INPUT WATTS: 24.7W, DELIVERED LUMENS: 2124.7LM, LPW = 86, 0.96 S/MH, TEST NO: LTL29889P89

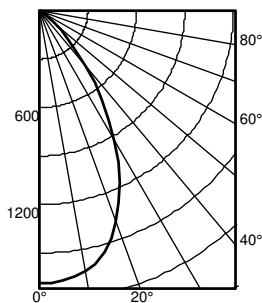


Ave	Lumens	Zone	Lumens	% Lamp
0	2040	0° - 30°	1243.3	58.5
5	2015	0° - 40°	1673.6	78.8
15	1752	0° - 60°	2013.1	94.7
25	1247	0° - 90°	2124.7	100.0
35	688	90° - 180°	0.0	0.0
45	292	0° - 180°	2124.7	*100.0
55	116			
65	62			
75	36			
85	10			
90	2			

*Efficiency

Mounting Height	Initial Center Beam	50% beam - Diameter	50% beam - FC	10% beam - Diameter	10% beam - FC
8.0	67.4	4.8	33.7	9.3	6.7
10.0	36.3	6.6	18.1	12.6	3.6
12.0	22.6	8.3	11.3	16.0	2.3
14.0	15.4	10.1	7.7	19.4	1.5
16.0	11.2	11.8	5.6	22.7	1.1

EVO6SQCR 35/25 DFR SMO 80CRI INPUT WATTS: 24.7W, DELIVERED LUMENS: 1820.8LM, LPW = 73.7, 0.9 S/MH, TEST NO: LTL29892P93

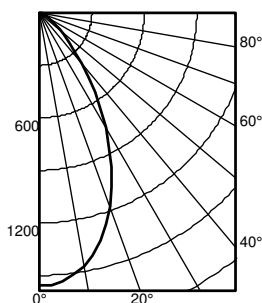


Ave	Lumens	Zone	Lumens	% Lamp
0	1690	0° - 30°	1123.6	61.7
5	1677	0° - 40°	1547.6	85.0
15	1550	0° - 60°	1800.7	98.9
25	1172	0° - 90°	1820.8	100.0
35	683	90° - 180°	0.0	0.0
45	251	0° - 180°	1820.8	*100.0
55	50			
65	12			
75	6			
85	1			
90	0			

*Efficiency

Mounting Height	Initial Center Beam	50% beam - Diameter	50% beam - FC	10% beam - Diameter	10% beam - FC
8.0	55.9	5.2	27.9	9.6	5.6
10.0	30.0	7.1	15.0	13.1	3.0
12.0	18.7	9.1	9.4	16.6	1.9
14.0	12.8	11.0	6.4	20.1	1.3
16.0	9.3	12.9	4.6	23.6	0.9

EVO6SQCR 35/25 DFR SOL 80CRI INPUT WATTS: 24.7W, DELIVERED LUMENS: 1655LM, LPW = 67, 0.85 S/MH, TEST NO: LTL29891P89



Ave	Lumens	Zone	Lumens	% Lamp
0	1560	0° - 30°	962.8	58.2
5	1539	0° - 40°	1309.3	79.1
15	1349	0° - 60°	1586.5	95.9
25	972	0° - 90°	1655.0	100.0
35	554	90° - 180°	0.0	0.0
45	242	0° - 180°	1655.0	*100.0
55	93			
65	44			
75	20			
85	2			
90	0			

*Efficiency

Mounting Height	Initial Center Beam	50% beam - Diameter	50% beam - FC	10% beam - Diameter	10% beam - FC
8.0	51.6	4.9	25.8	9.5	5.2
10.0	27.7	6.6	13.9	12.9	2.8
12.0	17.3	8.4	8.6	16.3	1.7
14.0	11.8	10.2	5.9	19.8	1.2
16.0	8.6	12.0	4.3	23.2	0.9

DFF SMO - Flush Clear				
Nominal Lumens	1000	1500	2000	2500
Delivered	870	1292	1754	2219
Wattage	9.6	14.7	19.7	24.7
Efficacy	90.6	87.9	89.0	89.8

*Lumen output for CRI80 - 3500K

DFF SOL - Flush Textured				
Nominal Lumens	1000	1500	2000	2500
Delivered	833	1238	1680	2125
Wattage	9.6	14.7	19.7	24.7
Efficacy	86.8	84.2	85.3	86.0

*Lumen output for CRI80 - 3500K

DFR SMO - Flush Clear				
Nominal Lumens	1000	1500	2000	2500
Delivered	714	1061	1440	1821
Wattage	9.6	14.7	19.7	24.7
Efficacy	74.4	72.2	73.1	73.7

*Lumen output for CRI80 - 3500K

DFR SOL - Regressed Textured				
Nominal Lumens	1000	1500	2000	2500
Delivered	649	964	1309	1655
Wattage	9.6	14.7	19.7	24.7
Efficacy	67.6	65.6	66.4	67.0

*Lumen output for CRI80 - 3500K

CCT/CRI Multiplier Table		
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

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)

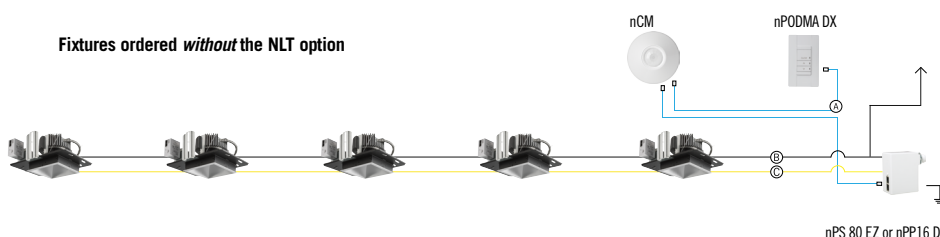
	Model Number
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX

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

