

ESA Series

ESA™ LED Lensed Wall Wash – Square 8" Aperture

Product Description

Lensed wall wash/downlight luminaire with 8" (203mm) square aperture, designed for 28 high output LEDs. Optical system, with an efficient prismatic glass spread lens, provides a pattern that is close to the ceiling and features wide lateral spread.

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Refer to chart on page 2

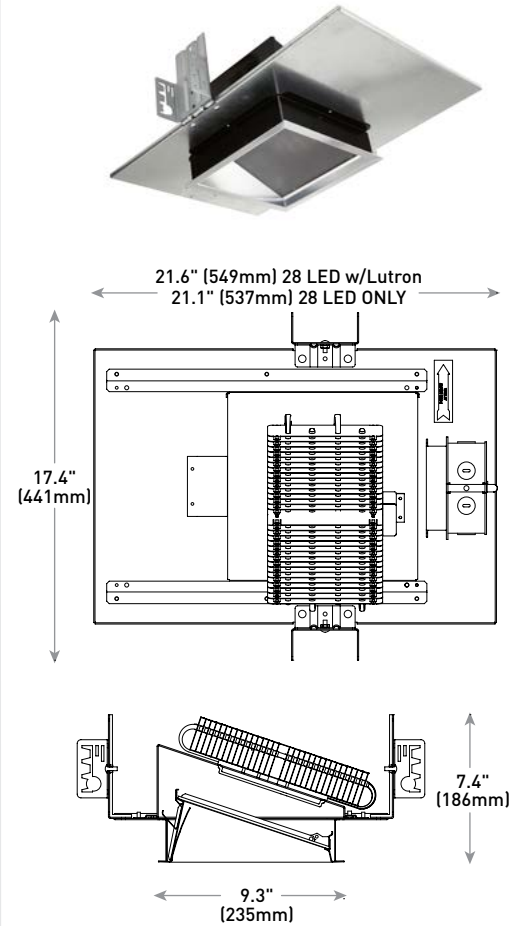
CCT: 2700K, 3000K, 3500K (standard) , 4000K

Limited Warranty†: 10 years on luminaire

† See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Companion Luminaires	
LED Downlight ESA-ADS-WD-8-28-D-SSGCFF	LED Adjustable Wallwash ESA-ADS-NDADJ-8-28-D-SGCFF



Ordering Information

Example: ESA-ADS-LWW-8-28-D-120-SSGC-FF-C

ESA	ADS	LWW	8		D				C	
Family Name	Type	Optic	Aperture Size	LED Count	Series	Voltage	Trim Finish ¹	Flange Finish	Drive Current	Options
ESA	ADS Architectural Downlight Square	LWW Lensed Wall Wash	8 8 inch	28	D	120 120V 230 230V 277 277V	SSGC Clear SSGGR Graphite SSGBR Bronze SSGCG Champagne Gold SSGPE Pewter SSGWH Wheat SSGB Black W White Paint	FF Flat Flange WF White Flange XF Custom Color Flange	C 525mA	27K 2700K ² - 90+ CRI 30K 3000K ² - 90+ CRI 40K 4000K ² - 80+ CRI DH Dimming ³ - Optional Lutron® Hi-Lume® driver available ES Flangeless FS Fusing LM Shielding Media SCA Slope Ceiling Adapter MC Mounting Channels

1. SSG = Satin Glow Anti-Iridescent
2. Color temperature per luminaire; 3500K Standard



US: lighting.cree.com

T (800) 236-6800 F (262) 504-5415

Rev. Date: V2 R1 10/03/2018

Canada: www.cree.com/canada



T (800) 473-1234 F (800) 890-7507

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Product Specifications

CONSTRUCTION & MATERIALS

- Luminaire uses 28 high output LEDs, tolerance to be within a 2-step MacAdam Ellipse
- Tilted Axial and Axial TIR NanoOptic® on each individual LED to maximize light delivered through aperture
- Lower cone is die formed, low-iridescent, 0.032" (1mm) thick, pre-finished aluminum
- Soft Satin Glow Clear finish, standard
- Precision stainless steel retainers assure that the lower cone is held in position
- Prismatic glass spread lens
- 2" (51mm) aperture throat to accommodate all standard and extra-thick ceilings and provide flexibility in mounting within grid
- Custom heat pipe to optimize cooling of LEDs
- Aluminum light engine housing with patented Slideways™ feature for ease of maintenance from below the ceiling, also provides optical alignment. Interior surface is painted matte black to suppress stray light leaks
- Provided with quick mounting brackets for optional carrying channels
- Light engine, optics, and driver accessible from above or below ceiling

ELECTRICAL SYSTEM

- High efficiency constant current drivers 525mA drive current
- **Input Voltage:** 120V (50-60Hz), 230V (50Hz), or 277V (50-60Hz)
- 0-10V dimming, standard. 100%-10% full-range continuous dimming
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for damp locations
- Meets Buy American requirements within ARRA
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

PATENTS

- Patented Slideways™ feature for ease of maintenance from below the ceiling

Electrical Data*		
System Watts 120-277V	Total Current (A)	
	120V	277V
0-10V Dimming, 525mA		
52	0.43	0.19
Lutron® Hi-Lume®, 525mA		
55	0.31	0.14

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V +/- 10%

ESA Series Lumen Maintenance Factors (LMF) ¹					
Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.96	0.94
20°C (68°F)	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

Color Tolerance			
Color	Target CCT	Tolerance	CRI
4000K	3899	+/- 75K	80
3500K	3388	+/- 63K	80
3000K	2993	+/- 50K	90
2700K	2755	+/- 42K	90

Installation

- Recommended ceiling cutout 8.5" (216mm) x 8.5" (216mm)

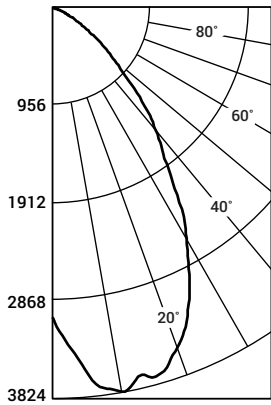


Lensed Wallwash Distribution			
LED Count	2700K	3000K	3500K/4000K
	Initial Delivered Lumens	Initial Delivered Lumens	Initial Delivered Lumens
28	2,084	2,266	3,021

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Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards



Configured from Test Report #: LTL27428
 ESA-ADR-LWW-8-28-C-120-SSGC-FF-C-35K
 Initial Delivered Lumens: 3,021
 Efficacy: 58 Lm/W
 S/M: 1.24

Candlepower Summary	
Angle	Mean CP
0°	3062
5°	3595
15°	3727
25°	3267
35°	2178
45°	1204
55°	557
65°	187
75°	47
85°	2
90°	0

Zonal Lumen Summary	
Verticle Angle	Average
45°	46520
55°	26543
65°	12063
75°	4974
85°	679

Cone of Light						
Distance from Ceiling	3' from Wall				4' from Wall	
	3' Apart		4' part		4' part	
	Ctr Line	Midpt	Ctr Line	Midpt	Ctr Line	Midpt
1'	7	6	6	4	2	2
2'	33	27	28	17	10	8
3'	55	49	45	33	22	19
4'	62	60	51	42	31	28
5'	58	57	45	42	35	34
6'	52	51	39	39	33	33
7'	44	44	33	33	32	32
8'	36	36	28	27	29	29
9'	30	30	23	23	26	26
10'	25	25	19	19	22	22

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