

ESA Series

ESA™ LED Adjustable Downlight – Round 6" Aperture

Product Description

Adjustable accent luminaire with 6" (152mm) round aperture, designed for 14 high output LEDs maximum. Optical assembly consists of a light engine and a low brightness Alzak aluminum angle-cut parabolic cone with no flashback at maximum aiming angle. Two light distributions available – narrow spot and narrow.

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

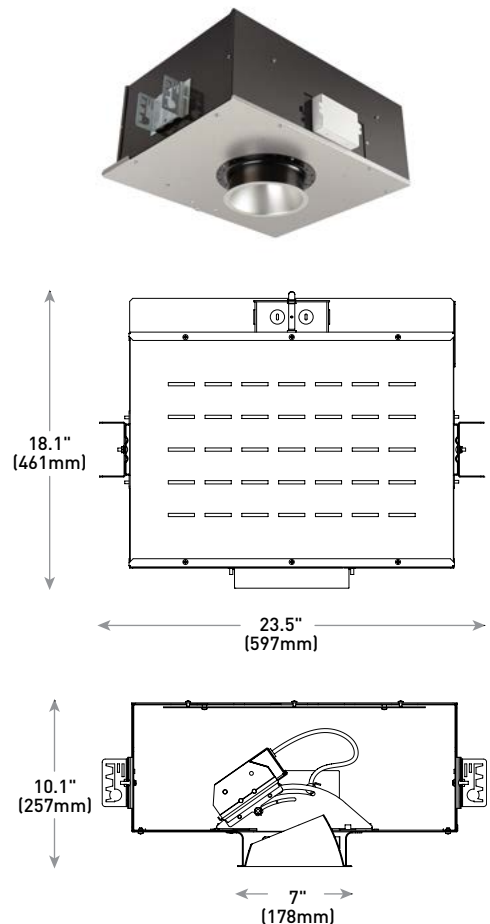
CCT: 2700K, 3000K, 3500K (standard) , 4000K

Limited Warranty*: 10 years on luminaire

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

Accessories

Companion Luminaires	
LED Adjustable Downlight ESA-ADR-NDADJ-6-28-D-SSGCFF	LED Lensed Wallwash ESA-ADR-LWW-6-14-D-SGCFF



Ordering Information

Example: ESA-ADR-NDADJ-6-14-D-120-SSGC-FF-D

ESA	ADR		6		D				C	
Family Name	Type	Optic	Aperture Size	LED Count	Series	Voltage	Trim Finish ¹	Flange Finish	Drive Current	Options
ESA	ADR Architectural Downlight Round	NDADJ Narrow (25° Beam) NSADJ Narrow Spot (15° Beam)	6 6 inch	14 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 - Optional Lutron® Hi-Lume® driver available ES Flangeless FS Fusing MC Mounting Channels

1. SSG = Satin Glow Anti-Iridescent

2. Color temperature per luminaire; 3500K Standard



US: lighting.cree.com

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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 14 high output LEDs, tolerance to be within a 2-step MacAdam Ellipse
- Axial TIR NanoOptic® on each individual LED to maximize light delivered through aperture
- Low brightness parabolic spun Alzak aluminum cone, 0.06" (2mm) thick with polished radius and continuous self-flange
- Soft Satin Glow Clear finish, standard
- Torsion springs for ease of installation and proper trim alignment
- 358° rotation and 35° maximum vertical adjustment
- Positive locking system assures correct focus and proper position
- 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
- Provided with quick mounting brackets for optional carrying channels
- Light engine, optics, and driver accessible from 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

Electrical Data*

System Watts 120-277V	Total Current (A)	
	120V	277V
0-10V Dimming, 525mA		
52	0.43	0.19
Lutron® Hi-Lume®, 525mA		
30	0.23	0.11

* 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 6.5" (165mm)

