BetaLED reserves the right to change specifications or materials that will not affect product function.

ESSENTIA™ INTERIOR LED

LED Adjustable Downlight – Round 8" Aperture

ESA-ADR-828-C-ADJ

DESCRIPTION

Adjustable accent luminaire with 8" round aperture, designed for 28 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. Three light distributions available – narrow pin, narrow spot and narrow.

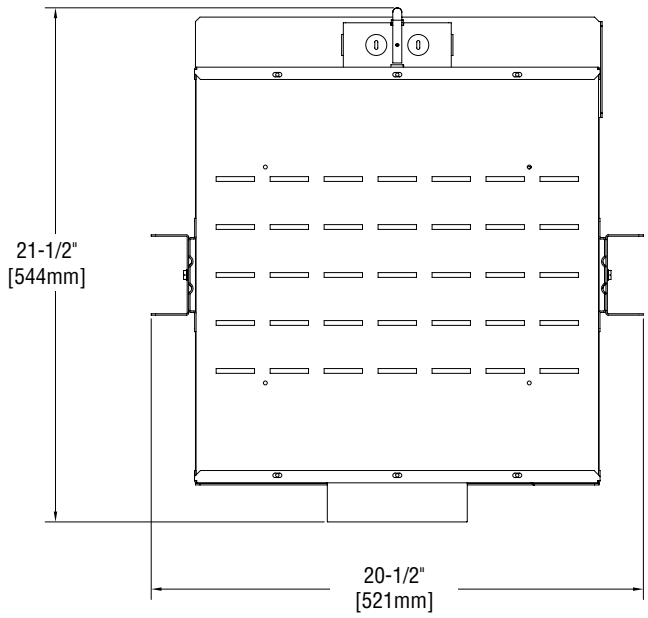
FEATURES

- Luminaire uses 28 high output LEDs, tolerance to be within a 2-step McAdam Ellipse. See table for specific color tolerance (at right).
- Tilted Axial and/or Axial TIR NanoOptic® on each individual LED to maximize light delivered through aperture.
- Low brightness parabolic spun Alzak aluminum cone, 0.06" 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" aperture throat to accommodate all standard and extra-thick ceilings and provide flexibility in mounting within grid.
- Custom heatpipe to optimize cooling of LEDs.
- Provided with quick mounting brackets for optional carrying channels.
- High Efficiency constant current drivers, 120-277VAC input, 525mA drive current.
- 0-10V dimming, standard. 100%-10% full-range continuous dimming.
- Light engine, optics and driver(s) accessible from below ceiling.
- UL/CUL listed for thru-wiring 8#12AWG-90°C and damp location.
- Thermally protected.

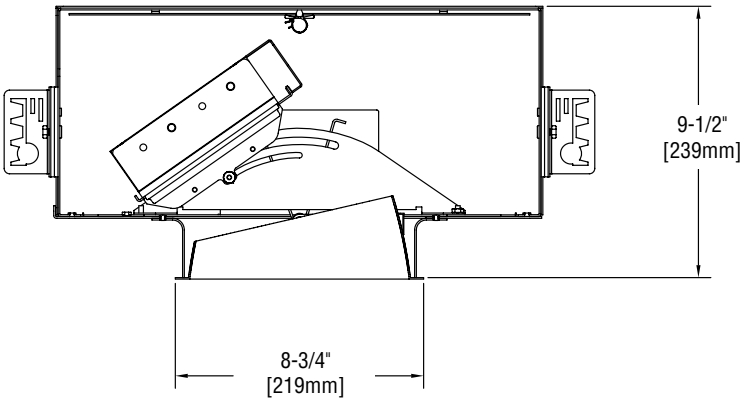
COMPANION LUMINAIRES

LED Downlight	ESA-ADR-856-C-WD-SGCFF
LED Lensed Wallwash	ESA-ADR-828-C-LWW-SGCFF

Notes:



Color Tolerance	
2700K	+/- 42K
3000K	+/- 50K
3500K	+/- 63K
4250K	+/- 95K



PATENT PENDING

RECESSED LED

Family/ Series	Product	Aperture (Inches)	LED Count (# of LEDs)	LED Performance Generation	Optic	Reflector/Cone Finish	Flange Finish	Voltage	Drive Current	Options (Please type additional options in manually on the lines provided below.)
ESA	ADR	___	___	C	___	_____	___	___	___	___
		8	28	C	**NDADJ** Narrow (25˚Beam)	**SSGC** Soft Satin Glow Al Clear	**FF** Flat Flange	**120** 120V	**525** 525mA	**27K** 2700K (90 Nominal CRI)
					NSADJ Narrow spot (15˚Beam)	**SSGGR** Soft Satin Glow Al Graphite	**WF** White Flange	**277** 277V		**30K** 3000K (85+ CRI)
					NPADJ Narrow Pin (10˚ Beam)	**SSGBR** Soft Satin Glow Al Bronze	**XF** Custom Color Flange			**35K** 3500K (80+ CRI)
						SSGCG Soft Satin Glow Al Champange Gold				**43K** 4250K (70+ CRI)
						SSGPE Soft Satin Glow Al Pewter				**DH** Dimming Lutron HiLume (525mA)
						SSGWH Soft Satin Glow Al Wheat				**FS** Fusing
						SSGB Soft Satin Glow Al Black				**SCA** Slope Ceiling Adapter
						W White Paint				**MC** Mounting Channels
										ES Flangeless
Example:										
ESA	ADR	8	28	C	NDADJ	SSGC	FF	120	525	___

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NOTE: All data subject to change without notice.

Made in the U.S.A. of U.S. and imported parts.
Meets Buy American requirements within the ARRA.

Rev. Date: L8-07/25/11

LED COLOR MULTIPLIER

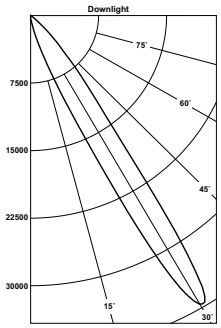
COLOR TEMPERATURE	LUMEN MULTIPLIER	COLOR TEMPERATURE	LUMEN MULTIPLIER
2700K	0.93	3500K	1.00
3000K	1.00	4250K	1.14

PHOTOMETRICS

ESAADR828ADJNPSGCFF12052535K
LED Count: 28
Efficacy: 56.3 Lm/W
S/M: 0.73
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 3011
Aiming Angle: 30°
Test No.: LTL21984

LUMINANCE DATA
candela/meter²

VERTICAL ANGLE	AVERAGE
45°	163000
55°	16200
65°	1686
75°	202
85°	0



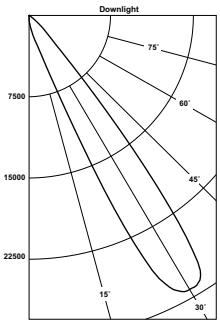
CANDELA DISTRIBUTION

DEGREES	CD
0°	320
5°	551
15°	3087
25°	19320
35°	19360
45°	3396
55°	274
65°	21
75°	2
85°	0
90°	0

ESAADR828ADJNSSGCFF12052535K
LED Count: 28
Efficacy: 53.3 Lm/W
S/M: 0.41
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 2854
Aiming Angle: 30°
Test No.: LTL22574

LUMINANCE DATA
candela/meter²

VERTICAL ANGLE	AVERAGE
45°	110600
55°	17950
65°	846
75°	259
85°	0



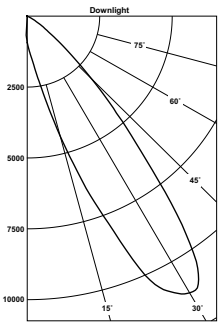
CANDELA DISTRIBUTION

DEGREES	CD
0°	379
5°	828
15°	2803
25°	24690
35°	24940
45°	2230
55°	293
65°	10
75°	2
85°	0
90°	0

ESAADR828ADJNDSGCFF12052535K
LED Count: 28
Efficacy: 53.4 Lm/W
S/M: 0.67
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 2780
Aiming Angle: 30°
Test No.: LTL23028

LUMINANCE DATA
candela/meter²

VERTICAL ANGLE	AVERAGE
45°	158300
55°	42640
65°	4114
75°	173
85°	0



CANDELA DISTRIBUTION

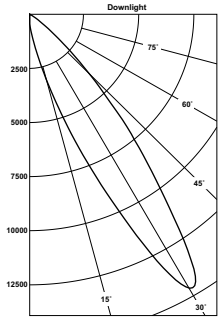
DEGREES	CD
0°	940
5°	1397
15°	4358
25°	10440
35°	9787
45°	3191
55°	697
65°	50
75°	1
85°	0
90°	0

PHOTOMETRICS - LENSED

ESAADR828ADJNPSGCFF12052535KLM
LED Count: 28
Efficacy: 47.8 Lm/W
S/M: 0.63
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 2553
Aiming Angle: 30°
Test No.: LTL21978

LUMINANCE DATA
candela/meter²

VERTICAL ANGLE	AVERAGE
45°	177500
55°	32190
65°	2745
75°	326
85°	0



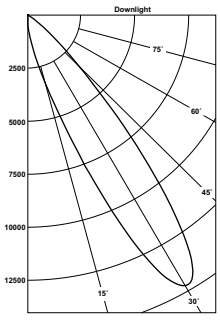
CANDELA DISTRIBUTION

DEGREES	CD
0°	456
5°	842
15°	3479
25°	10790
35°	11470
45°	3697
55°	544
65°	34
75°	2
85°	0
90°	0

ESAADR828ADJNSSGCFF12052535KLM
LED Count: 28
Efficacy: 48.8 Lm/W
S/M: 0.57
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 2607
Aiming Angle: 30°
Test No.: LTL22572

LUMINANCE DATA
candela/meter²

VERTICAL ANGLE	AVERAGE
45°	159200
55°	26880
65°	2018
75°	347
85°	0



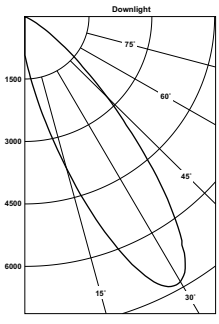
CANDELA DISTRIBUTION

DEGREES	CD
0°	486
5°	953
15°	3640
25°	12080
35°	12640
45°	3208
55°	439
65°	24
75°	3
85°	0
90°	0

ESAADR828ADJNDSGCFF12052535KLM
LED Count: 28
Efficacy: 47.0 Lm/W
S/M: 0.71
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 2446
Aiming Angle: 30°
Test No.: LTL23026

LUMINANCE DATA
candela/meter²

VERTICAL ANGLE	AVERAGE
45°	137800
55°	46510
65°	5517
75°	260
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	933
5°	1444
15°	3751
25°	6949
35°	6383
45°	2776
55°	760
65°	66
75°	2
85°	0
90°	0

All photometric files available for your convenience at our web site: www.BetaLED.com