

ESA-ADS-856-C

DESCRIPTION

Downlight luminaire with 8" square aperture, designed for 56 high output LEDs maximum. Two piece optical assembly provides a broad, even light distribution, combining low brightness, with maximum visual cutoff and efficiency. Three light distributions available – narrow, medium, and wide.

FEATURES

- Luminaire uses 28, 42, or 56 high output LEDs, tolerance to be within a 2-step McAdam Ellipse. See table for specific color tolerance (at right).
- Axial and Tilted Axial TIR nano optic on each individual LED to maximize light delivered through aperture.
- Light distribution available in narrow, medium, or wide.
- Lower cone is die formed, low-iridescent, 0.032" thick, pre-finished aluminum.
- Soft satin Glow Clear finish, standard.
- Precision nickel plated cone retainers assure that the lower cone is held in position.
- Formed cone blackout baffle to minimize stray light.
- 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 Adjustable Downlight

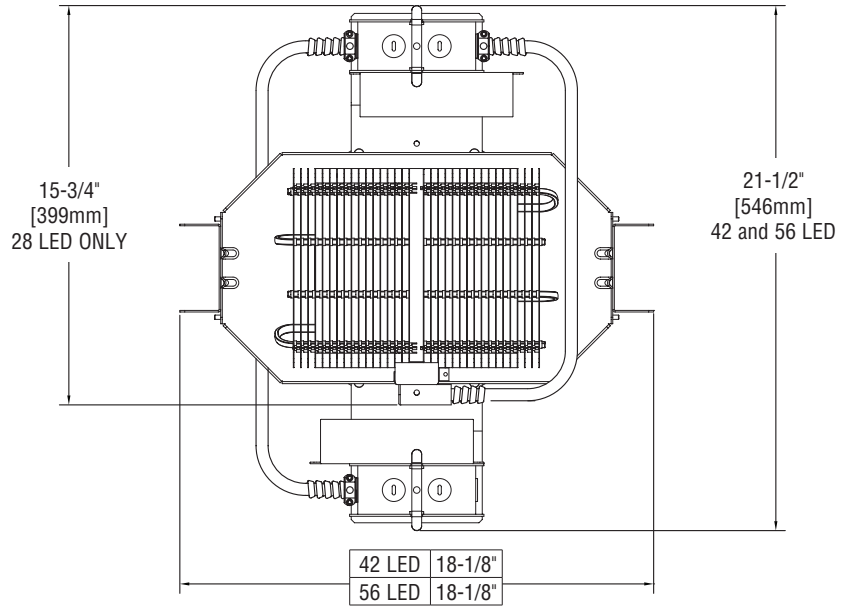
ESA-ADS-828-C-NDADJ-SGCF

LED Lensed Wallwash

ESA-ADS-828-C-LWW-SGCF

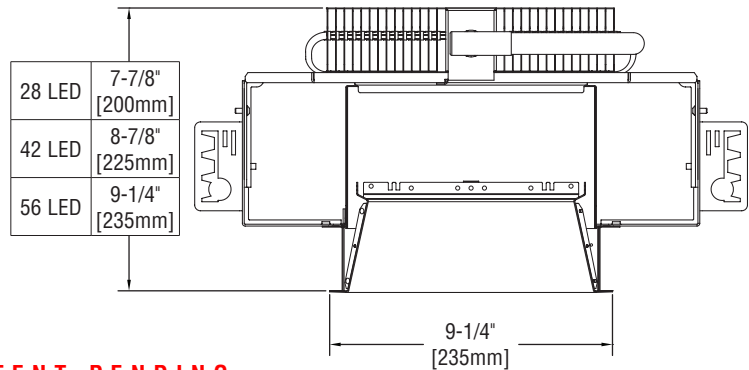
Notes:

LED Architectural Downlight – Square 8" Aperture



Recommended Ceiling Cutout 8-1/2" x 8-1/2"

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



PATENT PENDING

Family/ Series	Product	Aperture (Inches)	LED Count (# of LEDs)	LED Performance Generation	Optic	Reflector/Cone Finish	Flange Finish	Voltage	Drive Current	Options		
ESA	ADS	8	28	C	WD	SSGC	FF	120	525	Please type additional options in manually on the lines provided below.		
			42		MD	SSGGR	WF				120V	525mA
			56		ND	SSGBR	XF	277V	525mA			
							SSGCG	Flange				27K
							SSGPE					30K
							SSGWH					35K
							SSGB					43K
							W					DH
												LM
												FS
												MC
												WL
									ES			
									TR			

Example:

ESA ADS 8 56 C WD SSGC FF 120 525

© 2011 BetaLED® • 1200 92nd Street • Sturtevant, WI 53177 • 800-236-6800 • www.BetaLED.com



PHOTOMETRICS

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

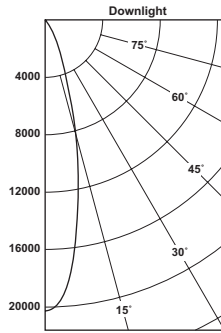
ESAADS856CND5GCF12052535K

LED Count: 56
Efficacy: 49 Lm/W
S/M: 0.43
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 5256
Test No.: LTL20281

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	562
55°	173
65°	118
75°	0
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	20269
5°	18406
15°	8228
25°	2417
35°	586
45°	16
55°	4
65°	2
75°	0
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	563	2.6'
8'	317	3.4'
10'	203	4.2'
12'	141	5.0'
14'	103	6.0'

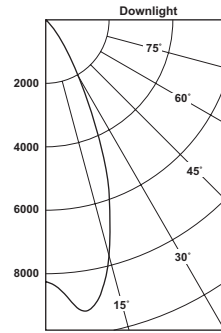
ESAADS856CND5GCF12052535K

LED Count: 56
Efficacy: 48.8 Lm/W
S/M: 0.8
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 5243
Test No.: LTL20514

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	610
55°	230
65°	113
75°	0
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	8252
5°	8861
15°	7645
25°	3788
35°	967
45°	18
55°	5
65°	2
75°	0
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	245	4.6'
8'	141	6.0'
10'	89	7.6'
12'	63	9.0'
14'	46	10.4'

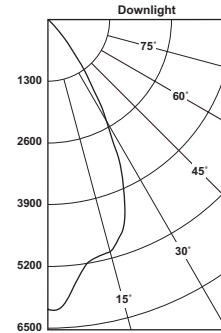
ESAADS856CWD5GCF12052535K

LED Count: 56
Efficacy: 44.5 Lm/W
S/M: 0.88
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 4773
Test No.: LTL20732

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	2013
55°	302
65°	196
75°	58
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	6101
5°	5738
15°	5061
25°	3719
35°	1436
45°	59
55°	7
65°	3
75°	1
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	169	5.4'
8'	95	7.0'
10'	61	8.8'
12'	42	10.6'
14'	31	12.0'

PHOTOMETRICS - LENSED

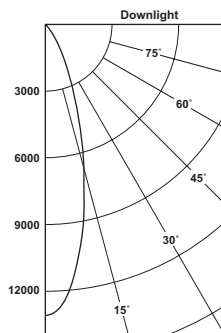
ESAADS856CND5GCF12052535KLM

LED Count: 56
Efficacy: 44.7 Lm/W
S/M: 0.5
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 4788
Test No.: LTL20279

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	6496
55°	2355
65°	940
75°	0
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	13083
5°	12058
15°	6673
25°	2589
35°	814
45°	190
55°	56
65°	16
75°	0
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	363	3.0'
8'	204	4.0'
10'	131	5.0'
12'	91	6.0'
14'	67	7.0'

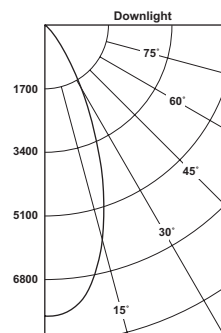
ESAADS856CND5GCF12052535KLM

LED Count: 56
Efficacy: 44.1 Lm/W
S/M: 0.71
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 4728
Test No.: LTL20512

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	8604
55°	2643
65°	903
75°	74
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	7773
5°	7650
15°	5934
25°	3139
35°	1096
45°	251
55°	63
65°	16
75°	1
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	216	4.2'
8'	121	5.6'
10'	78	7.0'
12'	54	8.4'
14'	40	9.8'

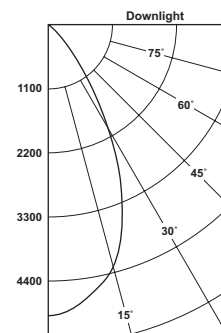
ESAADS856CWD5GCF12052535KLM

LED Count: 56
Efficacy: 39.4 Lm/W
S/M: 0.86
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 4224
Test No.: LTL20730

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	10101
55°	3153
65°	1254
75°	94
85°	70



CANDELA DISTRIBUTION

DEGREES	CD
0°	4992
5°	4876
15°	4288
25°	2916
35°	1271
45°	295
55°	75
65°	22
75°	1
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	139	5.0'
8'	78	6.8'
10'	50	8.6'
12'	35	10.2'
14'	25	12.0'

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

