

## ESA-ADS-628-C

### DESCRIPTION

Downlight luminaire with 6" square aperture, designed for 28 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 14, or 28 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 driver, 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

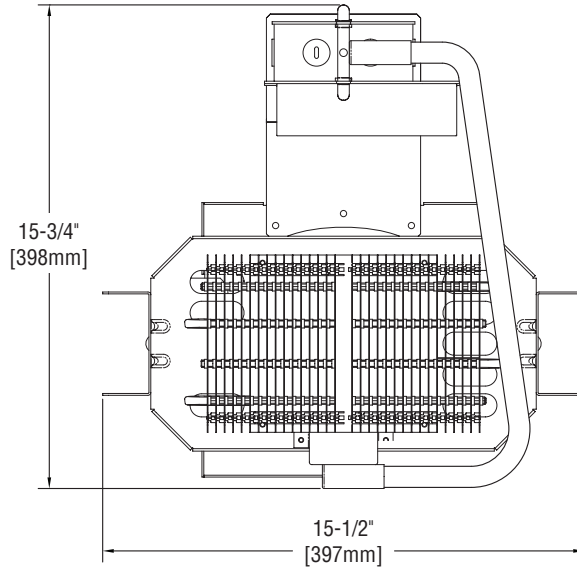
ESA-ADS-614-C-NDADJ-SGCFF

#### LED Lensed Wallwash

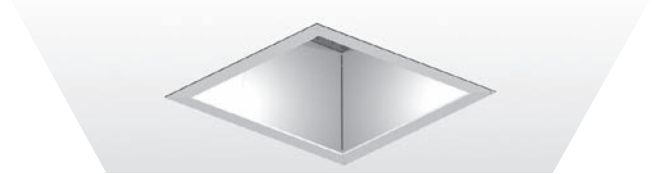
ESA-ADS-614-C-LWW-SGCFF

#### Notes:

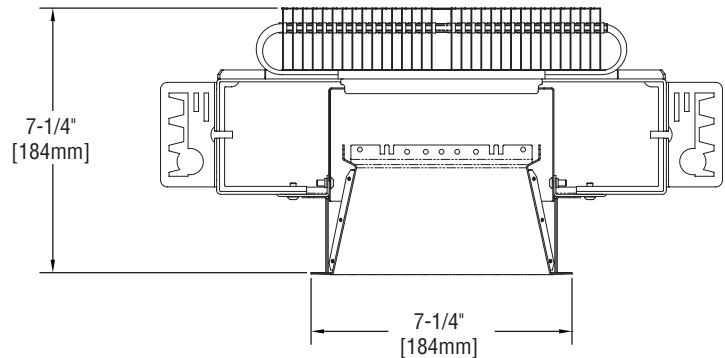
## LED Architectural Downlight – Square 6" Aperture



Recommended Ceiling Cutout 6-1/2" x 6-1/2"



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	6	14	C	WD	SSGC	FF	120	525	Please type additional options in manually on the lines provided below. 27K 2700K (90 Nominal CRI) 30K 3000K (85+ CRI) 35K 3500K (80+ CRI) 43K 4250K (70+ CRI) DH Dimming Lutron HiLume (525mA) LM Lens Media FS Fusing MC Mounting Channels WL Wet Location ES Flangeless TR Top Access
			28		MD	SSGGR	WF	277	277V	
				ND	SSGBR	XF				
					SSGCG					
					SSGPE					
					SSGWH					
					SSGB					
					W					

Example:

ESA ADS 6 28 C WD SSGC FF 120 525

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PHOTOMETRICS

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

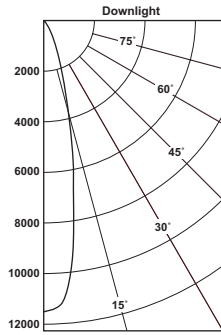
**ESAADS628CND5GCF12052535K**

LED Count: 28  
Efficacy: 50.8 Lm/W  
S/M: 0.39  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 2704  
Test No.: LTL20443

**LUMINANCE DATA**

candela/meter<sup>2</sup>

VERTICAL ANGLE	AVERAGE
45°	1497
55°	835
65°	537
75°	292
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	11503
5°	10703
15°	3820
25°	1168
35°	271
45°	25
55°	11
65°	5
75°	2
85°	0
90°	0

**CONE OF LIGHT**

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	320	2.4'
8'	180	3.2'
10'	115	4.0'
12'	80	4.8'
14'	59	5.6'

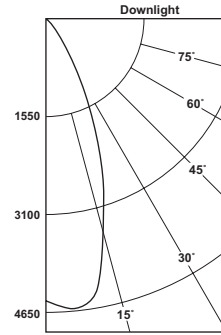
**ESAADS628CND5GCF12052535K**

LED Count: 28  
Efficacy: 49.8 Lm/W  
S/M: 0.70  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 2642  
Test No.: ITL65682

**LUMINANCE DATA**

candela/meter<sup>2</sup>

VERTICAL ANGLE	AVERAGE
45°	2337
55°	1225
65°	978
75°	479
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	4465
5°	4608
15°	3478
25°	1735
35°	490
45°	40
55°	17
65°	10
75°	3
85°	0
90°	0

**CONE OF LIGHT**

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	127	4.2'
8'	72	5.6'
10'	46	7.0'
12'	32	8.4'
14'	23	9.4'

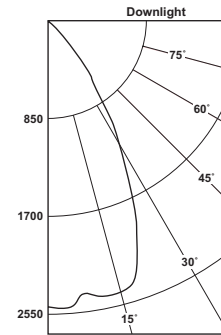
**ESAADS628CWD5GCF12052535K**

LED Count: 28  
Efficacy: 45.2 Lm/W  
S/M: 1.00  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 2394  
Test No.: ITL66298

**LUMINANCE DATA**

candela/meter<sup>2</sup>

VERTICAL ANGLE	AVERAGE
45°	4265
55°	2017
65°	1466
75°	479
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	2483
5°	2488
15°	2439
25°	1775
35°	728
45°	73
55°	28
65°	15
75°	3
85°	0
90°	0

**CONE OF LIGHT**

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	69	5.8'
8'	39	8.2'
10'	25	9.6'
12'	17	11.6'
14'	13	13.4'

PHOTOMETRICS - LENSED

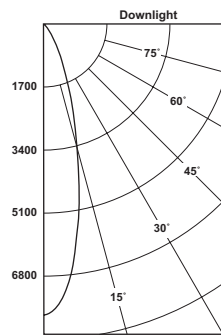
**ESAADS628CND5GCF12052535KLM**

LED Count: 28  
Efficacy: 46.3 Lm/W  
S/M: 0.46  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 2460  
Test No.: LTL20441

**LUMINANCE DATA**

candela/meter<sup>2</sup>

VERTICAL ANGLE	AVERAGE
45°	4140
55°	1780
65°	846
75°	329
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	7848
5°	7123
15°	3468
25°	1213
35°	350
45°	68
55°	24
65°	8
75°	2
85°	0
90°	0

**CONE OF LIGHT**

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	218	2.8'
8'	123	3.6'
10'	78	4.6'
12'	55	5.4'
14'	40	6.4'

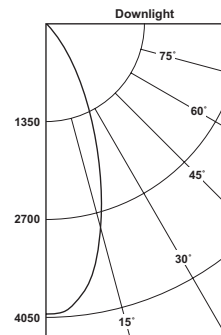
**ESAADS628CND5GCF12052535KLM**

LED Count: 28  
Efficacy: 44.7 Lm/W  
S/M: 0.70  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 2372  
Test No.: ITL65683

**LUMINANCE DATA**

candela/meter<sup>2</sup>

VERTICAL ANGLE	AVERAGE
45°	6252
55°	2089
65°	1075
75°	319
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	3999
5°	3915
15°	2908
25°	1545
35°	549
45°	107
55°	29
65°	11
75°	2
85°	0
90°	0

**CONE OF LIGHT**

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	111	4.2'
8'	62	5.6'
10'	40	6.8'
12'	28	8.2'
14'	20	9.6'

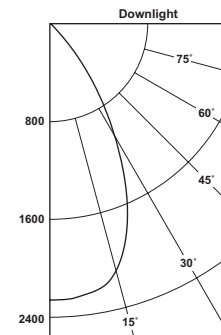
**ESAADS628CWD5GCF12052535KLM**

LED Count: 28  
Efficacy: 40 Lm/W  
S/M: 0.90  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 2117  
Test No.: ITL66299

**LUMINANCE DATA**

candela/meter<sup>2</sup>

VERTICAL ANGLE	AVERAGE
45°	8881
55°	2881
65°	1564
75°	639
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	2258
5°	2251
15°	2087
25°	1465
35°	697
45°	152
55°	40
65°	16
75°	4
85°	0
90°	0

**CONE OF LIGHT**

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	63	5.0'
8'	35	7.4'
10'	23	9.0'
12'	16	10.8'
14'	12	12.6'

All photometric files available for your convenience at our web site: [www.betalcd.com](http://www.betalcd.com)

RECESSED LED