

## ESA-ADS-414-C

### DESCRIPTION

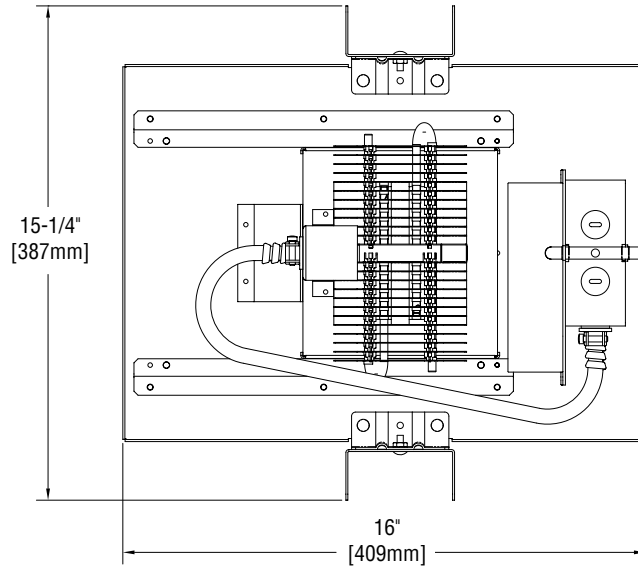
Downlight luminaire with 4" square aperture, designed for 14 high output LED's maximum. Two piece optical assembly provides a broad, even light distribution, combining low brightness, with maximum visual cutoff and efficiency. Three light distributions available – narrow, medium, and wide.

### FEATURES

- Luminaire uses 14 high output LED's, 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.
- Top access
- 2" aperture throat to accommodate all standard and extra-thick ceilings and provide flexibility in mounting within grid.
- Custom heatpipe to optimize cooling of LED's.
- 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.
- Patented Slideways™ feature for ease of maintenance from below the ceiling.
- Light engine, optics, and driver accessible from above or below ceiling.
- UL/CUL listed for thru-wiring 8#12AWG-90°C and damp location.
- Thermally protected.

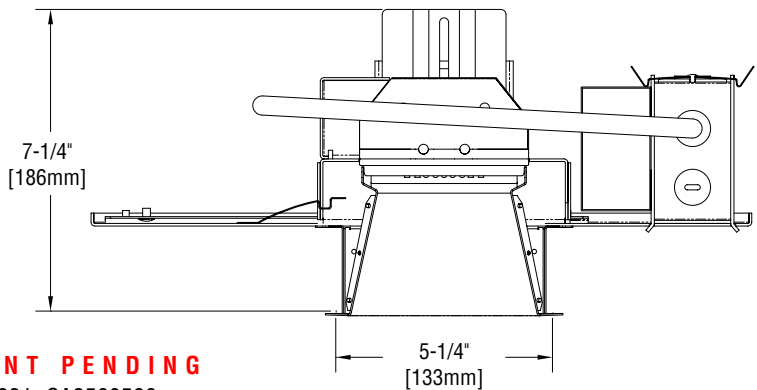
### Notes:

## LED Architectural Downlight – Square 4" Aperture



Recommended Ceiling Cutout 5"x 5"

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



**PATENT PENDING**  
US7478931 CA2560566

RECESSED LED

Family/ Series	Product	Aperture (Inches)	LED Count (# of LEDs)	LED Performance Generation	Optic	Reflector/Cone Finish	Flange Finish	Voltage	Drive Current	Options
<b>ESA</b>	<b>ADS</b>	4	14	<b>C</b>	<b>WD</b> Wide <b>MD</b> Medium <b>ND</b> Narrow	<b>SSGC</b> Soft Satin Glow Al Clear <b>SSGGR</b> Soft Satin Glow Al Graphite <b>SSGBR</b> Soft Satin Glow Al Bronze <b>SSGCG</b> Soft Satin Glow Al Champagne Gold <b>SSGPE</b> Soft Satin Glow Al Pewter <b>SSGWH</b> Soft Satin Glow Al Wheat <b>SSGB</b> Soft Satin Glow Al Black <b>W</b> White Paint	<b>FF</b> Flat Flange <b>WF</b> White Flange <b>XF</b> Custom Color Flange	<b>120</b> 120V <b>277</b> 277V	<b>525</b> 525mA	Please type additional options in manually on the lines provided below. <b>27K</b> 2700K (90 Nominal CRI) <b>30K</b> 3000K (85+ CRI) <b>35K</b> 3500K (80+ CRI) <b>43K</b> 4250K (70+ CRI) <b>DH</b> Dimming Lutron HiLume (525mA) <b>LM</b> Lens Media <b>FS</b> Fusing <b>MC</b> Mounting Channels <b>WL</b> Wet Location <b>ES</b> Flangeless
<b>ESA</b>	<b>ADS</b>	<b>4</b>	<b>14</b>	<b>C</b>	<b>WD</b>	<b>SSGC</b>	<b>FF</b>	<b>120</b>	<b>525</b>	

Example:



**PHOTOMETRICS**

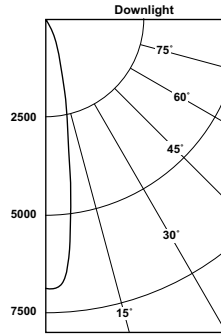
LED COLOR MULTIPLIER	COLOR TEMPERATURE		LUMEN MULTIPLIER	
	2700K	3000K	0.93	1.00
	3500K	4250K	1.00	1.14

**ESAADS414CNDSGCFF12052535K**

LED Count: 14  
Efficacy: 55.1 Lm/W  
S/M: 0.3  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 1448  
Test No.: ITL65337

**LUMINANCE DATA**

candela/meter <sup>2</sup>	
VERTICAL ANGLE	AVERAGE
45°	948
55°	130
65°	0
75°	0
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	6869
5°	6401
15°	1898
25°	578
35°	192
45°	9
55°	1
65°	0
75°	0
85°	0
90°	0

**CONE OF LIGHT**

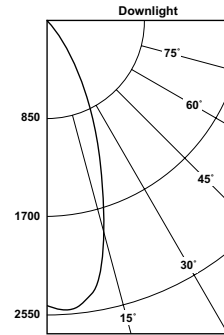
DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	191	2.2'
8'	107	2.8'
10'	69	3.6'
12'	48	4.2'
14'	35	4.8'

**ESAADS414CNDSGCFF12052535K**

LED Count: 14  
Efficacy: 53.8 Lm/W  
S/M: 0.7  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 1416  
Test No.: ITL65664

**LUMINANCE DATA**

candela/meter <sup>2</sup>	
VERTICAL ANGLE	AVERAGE
45°	1580
55°	260
65°	176
75°	0
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	2474
5°	2515
15°	1890
25°	924
35°	340
45°	15
55°	2
65°	1
75°	0
85°	0
90°	0

**CONE OF LIGHT**

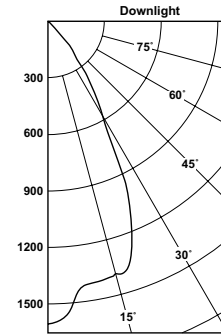
DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	69	4.2'
8'	39	5.6'
10'	25	7.0'
12'	17	8.6'
14'	13	9.6'

**ESAADS414CWDSGCFF12052535K**

LED Count: 14  
Efficacy: 51.3 Lm/W  
S/M: 0.89  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 1326  
Test No.: LTL20447

**LUMINANCE DATA**

candela/meter <sup>2</sup>	
VERTICAL ANGLE	AVERAGE
45°	2756
55°	260
65°	109
75°	89
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	1607
5°	1508
15°	1388
25°	992
35°	381
45°	25
55°	2
65°	1
75°	0
85°	0
90°	0

**CONE OF LIGHT**

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	45	5.4'
8'	25	7.4'
10'	16	9.0'
12'	11	11.0'
14'	8	13.0'

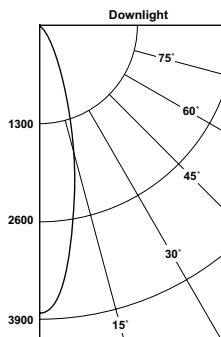
**PHOTOMETRICS - LENSED**

**ESAADR514CNDSGCFF12052535KLM**

LED Count: 14  
Efficacy: 48.4 Lm/W  
S/M: 0.5  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 1268  
Test No.: ITL65338

**LUMINANCE DATA**

candela/meter <sup>2</sup>	
VERTICAL ANGLE	AVERAGE
45°	3264
55°	649
65°	0
75°	0
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	3823
5°	3474
15°	1725
25°	652
35°	208
45°	31
55°	5
65°	0
75°	0
85°	0
90°	0

**CONE OF LIGHT**

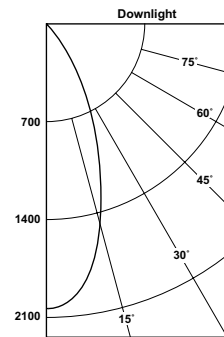
DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	106	2.8'
8'	60	3.8'
10'	38	4.8'
12'	27	5.6'
14'	20	6.4'

**ESAADS414CNDSGCFF12052535KLM**

LED Count: 14  
Efficacy: 46.2 Lm/W  
S/M: 0.7  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 1211  
Test No.: ITL65665

**LUMINANCE DATA**

candela/meter <sup>2</sup>	
VERTICAL ANGLE	AVERAGE
45°	5055
55°	649
65°	176
75°	0
85°	0



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	2036
5°	1985
15°	1480
25°	809
35°	307
45°	48
55°	5
65°	1
75°	0
85°	0
90°	0

**CONE OF LIGHT**

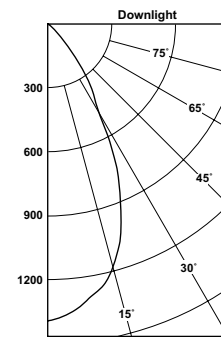
DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	57	4.2'
8'	32	5.6'
10'	20	7.0'
12'	14	8.4'
14'	10	10.0'

**ESAADS414CWDSGCFF12052535KLM**

LED Count: 28  
Efficacy: 43.3 Lm/W  
S/M: 0.83  
Color Temperature: 3500K  
Drive Current: 525mA  
Delivered Lumens: 1118  
Test No.: LTL20445

**LUMINANCE DATA**

candela/meter <sup>2</sup>	
VERTICAL ANGLE	AVERAGE
45°	6644
55°	999
65°	54
75°	89
85°	263



**CANDELA DISTRIBUTION**

DEGREES	CD
0°	1393
5°	1354
15°	1183
25°	781
35°	340
45°	61
55°	7
65°	0
75°	0
85°	0
90°	0

**CONE OF LIGHT**

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	39	5.0'
8'	22	8.4'
10'	14	8.6'
12'	10	10.0'
14'	7	12.0'

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

RECESSED LED