

ESA-ADR-414-C

DESCRIPTION

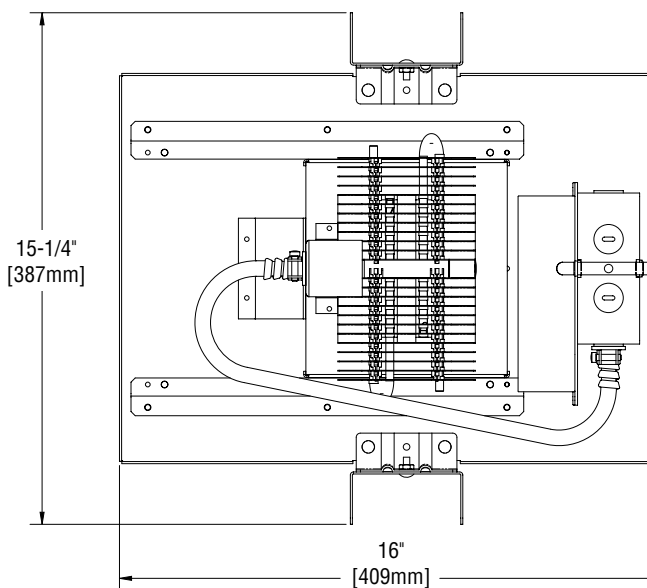
Downlight luminaire with 4" round aperture, designed for 14 high output LEDs maximum. Two piece optical assembly provides a broad, even light distribution, combining low brightness, with maximum visual cutoff and efficiency. Three light distributions available – narrow, medium, and wide.

FEATURES

- Luminaire uses 14 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 NanoOptic® on each individual LED to maximize light delivered through aperture.
- Light distribution available in narrow, medium, or wide.
- Low brightness parabolic spun Alzak aluminum cone, 0.06" thick with polished radius and continuous self-flange.
- 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 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.
- 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.

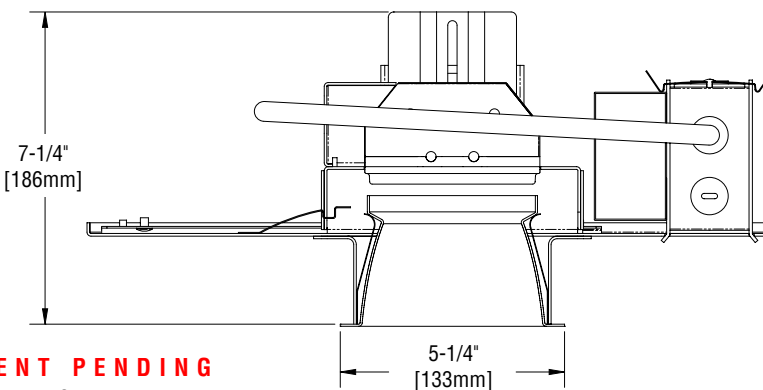
Notes:

LED Architectural Downlight – Round 4" Aperture



Recommended Ceiling Cutout 4-1/4"

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
ESA	ADR	4	14	C	WD Wide MD Medium ND Narrow	SSGC Soft Satin Glow Al Clear SSGGR Soft Satin Glow Al Graphite SSGBR Soft Satin Glow Al Bronze SSGCG Soft Satin Glow Al Champagne Gold SSGPE Soft Satin Glow Al Pewter SSGWH Soft Satin Glow Al Wheat SSGB Soft Satin Glow Al Black W White Paint	FF Flat Flange WF White Flange XF Custom Color Flange	120 120V 277 277V	525 525mA	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 SCA Slope Ceiling Adapter MC Mounting Channels WL Wet Location ES Flangeless
ESA	ADR	4	14	C	WD	SSGC	FF	120	525	

Example:



PHOTOMETRICS

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

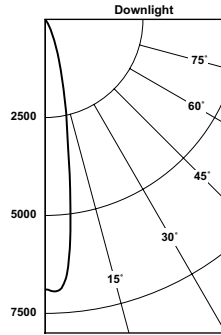
ESAADR414CNDSGCFF12052535K

LED Count: 14
Efficacy: 51.8 Lm/W
S/M: 0.3
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 1377
Test No.: ITL65684

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	3090
55°	1524
65°	776
75°	0
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	6895
5°	6494
15°	1812
25°	527
35°	100
45°	20
55°	8
65°	3
75°	0
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	192	2.0'
8'	108	2.8'
10'	69	3.5'
12'	48	4.0'
14'	35	4.8'

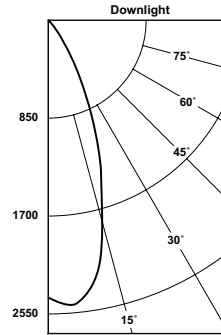
ESAADR414CNDSGCFF12052535K

LED Count: 14
Efficacy: 50.5 Lm/W
S/M: 0.7
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 1334
Test No.: ITL65312

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	4481
55°	1905
65°	1034
75°	844
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	2406
5°	2479
15°	1811
25°	866
35°	234
45°	29
55°	10
65°	4
75°	2
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	67	4.0'
8'	38	5.5'
10'	24	6.7'
12'	17	8.0'
14'	12	9.7'

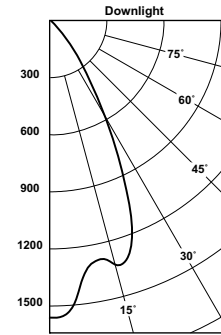
ESAADR414CWDSGCFF12052535K

LED Count: 14
Efficacy: 48.1 Lm/W
S/M: 0.88
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 1242
Test No.: LTL20196

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	8250
55°	2771
65°	1396
75°	760
85°	376



CANDELA DISTRIBUTION

DEGREES	CD
0°	1556
5°	1488
15°	1325
25°	925
35°	330
45°	53
55°	15
65°	5
75°	2
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	43	5.3'
8'	24	7.2'
10'	16	9.0'
12'	11	10.7'
14'	8	12.5'

PHOTOMETRICS - LENSED

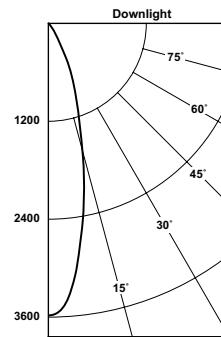
ESAADR414CNDSGCFF12052535KLM

LED Count: 14
Efficacy: 43.5 Lm/W
S/M: 0.5
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 1158
Test No.: ITL65685

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	6335
55°	2095
65°	776
75°	422
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	3579
5°	3261
15°	1616
25°	593
35°	163
45°	41
55°	11
65°	3
75°	1
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	99	2.7'
8'	56	3.5'
10'	36	4.5'
12'	25	5.3'
14'	18	6.3'

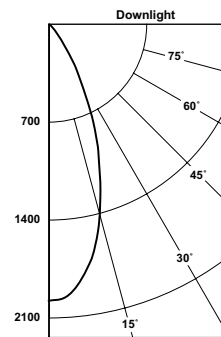
ESAADR414CNDSGCFF12052535KLM

LED Count: 14
Efficacy: 42.6 Lm/W
S/M: 0.7
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 1125
Test No.: ITL65313

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	9117
55°	2667
65°	1293
75°	844
85°	0



CANDELA DISTRIBUTION

DEGREES	CD
0°	1977
5°	1921
15°	1407
25°	735
35°	250
45°	59
55°	14
65°	5
75°	2
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	55	4.0'
8'	31	5.3'
10'	20	6.5'
12'	14	7.8'
14'	10	9.3'

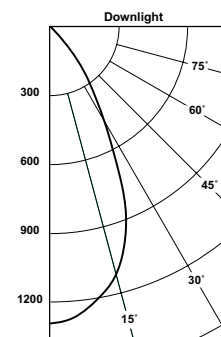
ESAADR414CWDSGCFF12052535KLM

LED Count: 14
Efficacy: 40.5 Lm/W
S/M: 0.85
Color Temperature: 3500K
Drive Current: 525mA
Delivered Lumens: 1045
Test No.: LTL20194

LUMINANCE DATA

candela/meter²

VERTICAL ANGLE	AVERAGE
45°	11065
55°	3310
65°	1472
75°	822
85°	376



CANDELA DISTRIBUTION

DEGREES	CD
0°	1290
5°	1267
15°	1114
25°	727
35°	309
45°	72
55°	17
65°	6
75°	2
85°	0
90°	0

CONE OF LIGHT

DISTANCE FROM WORKPLANE	FOOTCANDLES	BEAM DIAMETER
6'	36	5.0'
8'	20	6.8'
10'	13	8.5'
12'	9	10.2'
14'	7	11.5'

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



RECESSED LED