



DLED-ARFK9

9" Architectural LED Retrofit Kit

Client: _____ Order #: _____
Project Name: _____ Type: _____ Qty: _____

Performance Data

CRI
80+

CCT
3000K, 3500K, 4000K

Projected Lifetime
100,000+ Hours (L70)

Dimming
Triac 120V Standard,
0-10V Optional

Operating Temperature
-30°C to +45°C Ambient

ETL Listed
Suitable for dry and damp
locations



Description

The architectural-grade DLED-ARFK 9" recessed downlight retrofit features a high efficacy LED light engine and is available with multiple trim styles. Designed for use with existing 9" incandescent, fluorescent and metal-halide housings, it is also compatible with most 9" architectural housings measuring at least 8-5/16" high with an inside diameter between 9-1/2" and 10". The precision-designed optical diffuser allows for high lumen transmission while maintaining a soft, well-dispersed spread for today's interior spaces.

Features

Mounting Frame:

- 20-gauge CRS mounting ring, black-painted. 1-5/8" deep collar may use for various thickness of ceiling materials.

LED Module & Trim:

- Aluminum extruded Heat sink designed to facilitate heat dissipation to reduce LED junction temperature for maintaining constant light output, color and life of solid state components.

- Module construction includes LED, heat sink and lens.
- Heavy gauge aluminum reflector anodized in clear, haze, gold, champagne and pewter color finish.
- Reflectors may provide with black and white milled groove baffle collar.

• For more features see page 2

DLED-ARFK9

A

B

C

D

UNV

E

F

Ordering Information

A FIXTURE SERIES

DLED-AFK9 9" Architectural LED
Retrofit Kit

B WATTAGE/LUMENS

14A	14W/1000
23	23W/1800
30	30W/2560
45	45W/3200

C CCT

30	3000K
35	3500K
40	4000K

D TRIM

See Page 3

E VOLTAGE

UNV 120-277V¹

F OPTIONS

DM	Dimmable ²
EM	Emergency

¹ Triac 120V low voltage electronic dimmer switches

² 0-10V dimmer switches

Features (continues)

Junction Box:

- Listed for through branch circuit wiring. (Max.8 No 12 AWG 90°C branch circuit conductors. (4 in, 4 out)
- (5)1/2" knockouts with true pry-out slots and (4) knockouts with Romex cable clamp.
- Ground wire provided on J-box.

Listing:

- ETL Listed. CA Title 24.

Options:

- Emergency battery back-up: Available in mounted to fixture or remote adjacent to luminaire (consult with factory for exact application).

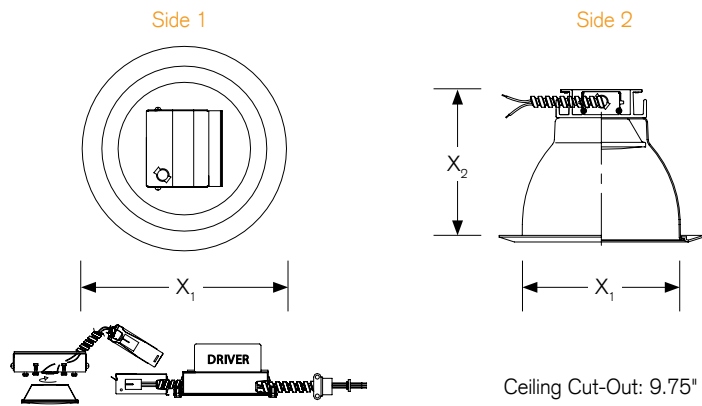
Color Rendering

- CRI rating of 80 or greater; R9 value of 10 or greater for crisp interior color accuracy.

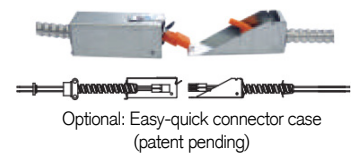
Electrical:

- 120~277V input high efficacy drivers with the capability to dim by 1a Triac 120V low voltage electronic dimmer switches, or 2by 0-10V dimmer switches.
- Driver feature power factor >.90, THD <20% and has integral thermal protection to sense over temperature or internal failure.
- Driver mounts externally to the module, allowing future replacement, if needed.
- Consult with factory for optional 0~10V analog dimmable driver.

Dimensions



Inches		
	Side 1	Side 2
X₁	11.25	9.375
X₂	--	8.3125



Photometrics

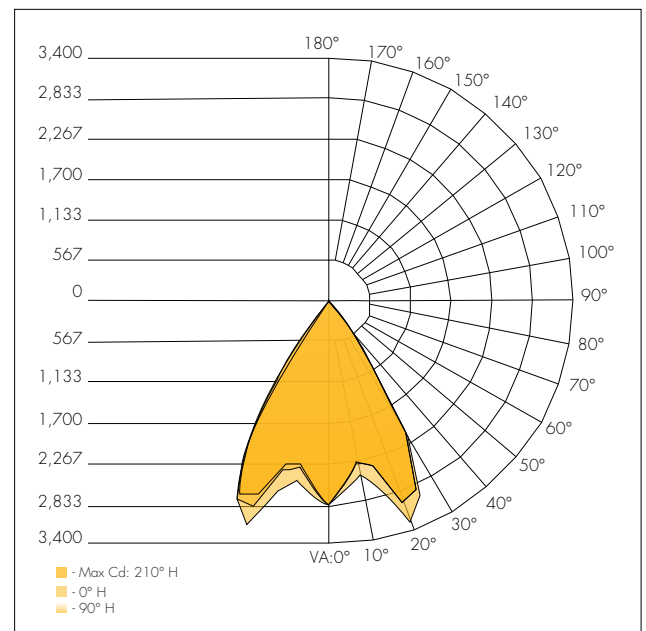
Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50				30				10				0
RW %:	70	50	30	0	70	50	30	0	50	30	20	0	50	30	20	0	50	30	20	0	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.11	1.06	1.06	1.06	1.06	1.02	1.02	1.02	1.02	1.00
1	1.14	1.11	1.08	1.06	1.11	1.09	1.06	.94	1.05	1.03	1.01	1.01	1.01	.99	.98	.97	.97	.96	.95	.93	.93
2	1.08	1.03	.99	.96	1.06	1.01	.98	.88	.98	.95	.92	.92	.95	.93	.91	.92	.90	.89	.89	.87	.87
3	1.02	.96	.91	.87	1.00	.95	.90	.82	.92	.88	.85	.85	.90	.86	.84	.87	.85	.82	.82	.81	.81
4	.97	.90	.84	.80	.95	.89	.83	.76	.86	.82	.79	.79	.84	.81	.78	.83	.79	.77	.77	.75	.75
5	.92	.84	.78	.74	.91	.83	.77	.71	.81	.76	.73	.73	.79	.75	.72	.78	.74	.71	.71	.70	.70
6	.88	.79	.73	.68	.86	.78	.72	.66	.76	.71	.68	.68	.75	.70	.67	.74	.70	.67	.67	.65	.65
7	.83	.74	.68	.63	.82	.73	.67	.62	.72	.67	.63	.63	.71	.66	.63	.69	.65	.62	.62	.61	.61
8	.79	.69	.63	.59	.78	.69	.63	.58	.68	.62	.59	.59	.67	.62	.58	.66	.61	.58	.58	.57	.57
9	.75	.65	.59	.55	.74	.65	.59	.54	.64	.59	.55	.55	.63	.58	.55	.62	.58	.55	.55	.53	.53
10	.71	.61	.56	.52	.70	.61	.55	.51	.60	.55	.51	.51	.59	.55	.51	.59	.54	.51	.51	.50	.50

Zonal Lumen Summary

Zone	Lumens	%Luminaire
0-30	2,301.6	74.4%
0-40	2,980.0	96.3%
0-60	3,083.5	99.6%
60-90	11.5	0.4%
0-90	3,095.0	100%

Model 9" 45W 4000K



Trims

DLEDT-R94SF

Specular Open Reflector



DLEDT-R914

Baffle w/ Reflector



DLEDT-R941

Baffle with Regressed Lens

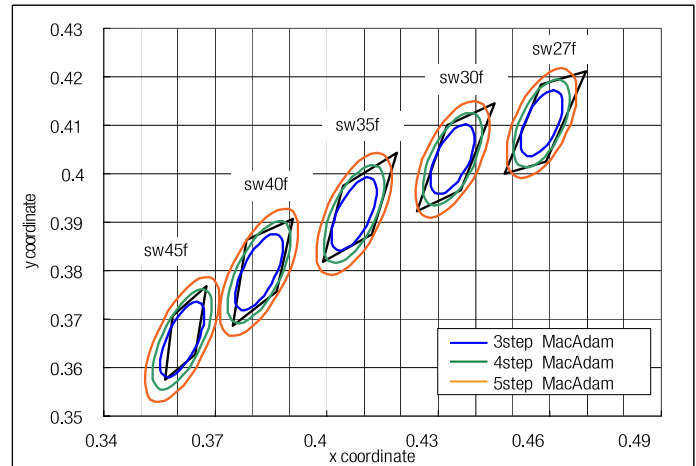


All trims are rated for damp location and regressed lens trims are wet location listed.

MacAdam Ellipse

A MacAdam ellipse is a region on a chromaticity diagram which contains all colors which are indistinguishable, to the average human eye, from the color at the center of the ellipse. This measure helps to establish the variability in color a light source can exhibit before a general observer will notice the shift in color. Each standard deviation out from the target center is referred to as a MacAdam step, with ANSI recommending that lamp manufacturers stay within a "4-step" ellipse. This 4-step MacAdam minimum requirement means that lamp manufacturers are given a great deal of allowance regarding the perceptible differences in color properties of their fixtures versus what they advertise.

Deco Lighting uses only the finest LEDs made by Nichia, the world's largest LED manufacturer. The Nichia LED is considered the Rolls Royce of LEDs. Featuring a 3-step MacAdam ellipse, the tightest binning in the industry, Nichia LEDs are held to a higher standard than minimum industry requirement and don't color-shift like fixtures utilizing lower quality LEDs.



sw27f

X	Y
0.4478	0.3999
0.4576	0.4183
0.4698	0.4212
0.4591	0.4025

sw30f

X	Y
0.4244	0.3923
0.4325	0.4101
0.4452	0.4146
0.4362	0.3965

sw35f

X	Y
0.3989	0.3819
0.4045	0.3975
0.4452	0.4044
0.4362	0.3875

sw40f

X	Y
0.3746	0.3687
0.3783	0.3836
0.3909	0.3906
0.3864	0.3757

sw45f

X	Y
0.3565	0.3576
0.3585	0.3706
0.3675	0.3769
0.3646	0.3627