DAY-O-LITE

Arc Series | ARCL-24S-D

Date	Notes
Project	
Type Qty	

Features

Custom-rolled aluminum housing w/welded end-plates.

LED optimized optics in multiple configurations.

LED optimized optics for smooth, efficient illumination.

Programmable driver for custom lumen packages.

0-10V dimming to 1% standard or Dim-to-Off.

DMX, Lutron and DALI protocols also available.

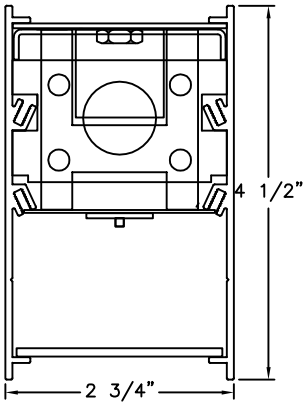
Sensor Ready for wireless Smart Lighting Solutions.

80/90CRI, Tunable White, RGBW & RGBWW.

Bios SkyBlue™ circadian solutions available.

Advanced Color (RGBW) w/pixel control to 5".

Declare Red List Approved.



Ordering Guide

Declare. BAA

MODEL	OPTICS	LED[1]	LUMENS[2]	SIZE	MOUNTING[3]	FINISH	OPTIONS
ARCL-24S-D	**DP**						
ARCL-24S-D Direct	DP = Diffuse Polycarbonate (lay-in)	**STATIC WHITE** 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 50 = 5000K **BIOS SkyBlue** Spectrally optimized circadian solutions. **TUNABLE WHITE** (2700K-6500K) 2DIM10 = for 0-10V 2DMX = for DMX 2ESN = for Philips 2CAS = for Casambi 2LUT = for Lutron **DIM-TO-WARM** (2700K-6500K) DTW = Dim-to-Warm **RGB + WHITE** RGB = RGB RGBW = RGBW RGBWW = RGBWW **ADVANCED COLOR** 125mm incremental pixel color control for chase and animated effects.	**SIZE 26** LO = 468/ft (5W/ft, 94LPW) SO = 622/ft (6.5W/ft, 96LPW) HO = 780/ft (8W, 98LPW) **SIZE 210** LO = 447/ft (5W/ft, 89LPW) SO = 595/ft (6.5W/ft, 92LPW) HO = 744/ft (8W, 93LPW) **SIZE 214** LO = 392/ft (5W/ft, 78LPW) SO = 523/ft (6.5W/ft, 80LPW) HO = 654/ft (8W, 82LPW) **CUSTOM** Specify lumen value < HO.	26 = 2'x6' 210 = 2'x10' 214 = 2'x14' Custom sizes configuration instructions page 3.	AC = Aircraft Cable PD = Pendant Stem S = Surface Mount	W = White CC = Custom Color AMW = Anti-Microbial White	**DIMMING DRIVERS** DIM10 = 0-10V (1%) Standard DTO = 0-10V (Dim-to-Off) DIMST = 0-10V Step Dimming DIMSR = DALI Sensor Ready (5.0%) DALI = DALI (5.0%) DMX = DMX **LUTRON™ DIMMING DRIVERS** LDE1 = Hi-Lume 1% EcoSystem LD2 = Digital 1% (DALI-2) L3DA3W = Hi-Lume 1% 3-Wire **SENSORS & CONTROLS[4]** AVO = Avi-On Sensor AWNS = Lutron Athena Sensor ESN = EasySense Sensor CAS = Casambi Wireless Control **EMERGENCY[5]** EMC = Emergency Circuit GTD = Generator Transfer Device EPC4 = 4W Emergency Battery EPC6 = 6.5W Emergency Battery EPC10 = 10W Emergency Battery EPC12 = 12W Emergency Battery **WIRING** DWH = DMX Wiring Harness

[1]All LED, BIOS, Tunable White, DTW, and RGB/W and Advanced Color options page 2.

[2]Lumens at 80CRI, 3500K, DP lens. Photometry page 3.

[3]See page 4 for mounting option details.

[4]All Sensor & Control options page 2.

[5]EPC6 is standard unless otherwise specified. EPC not for DMX drivers.

BAA letter of compliance available at www.dayolite.com.

LED, BIOS, Sensor & Control Ordering Codes

LED

Static White

30 = 3000K 80 CRI
35 = 3500K 80 CRI
40 = 4000K 80 CRI
50 = 5000K 80 CRI

927 = 2700K 90 CRI
930 = 3000K 90 CRI
935 = 3500K 90 CRI
940 = 4000K 90 CRI

Tunable White[1]
(2700K-6500K)

2DIM10 = 0-10V 80 CRI
2DMX = DMX 80 CRI
2CAS = Casambi Wireless 80 CRI
2ESN = Philips EasySense 80 CRI
2LUT = Lutron (LD2) 80 CRI

92DIM10 = 0-10V 90 CRI
92DMX = DMX 90 CRI
92CAS = Casambi Wireless 90 CRI
92ESN = Philips EasySense 90 CRI
92LUT = Lutron (LD2) 90 CRI

Dim-to-Warm[2]

DTW = 6500K-2700K 80 CRI
9DTW = 6500K-2700K 90 CRI

RGB/W[3]

RGB = RGB only
RGB27 = RGB w/2700K
RGB30 = RGB w/3000K
RGB35 = RGB W/3500K
RGB40 = RGB w/4000K
RGB50 = RGB w/5000K
RGBWW = RGB w/2700K-6500K

Single Color[4]

RED = Red
BLU = Blue
GRN = Green
AMB = Amber

Advanced Color[5]

Advanced Color options combine RGB or RGBW with multi-pixel control for advanced chases, animated visual effects and other programmable scenes with 125mm pixel granularity.

ACRGB = RGB only
AC27 = RGB w/2700K
AC30 = RGB w/3000K
AC40 = RGB w/4000K

BIOS SkyBlue

BIOS SkyBlue biological technology brings the benefits of blue skies inside. BIOS SkyBlue is the only spectrally optimized circadian solution to target the region that drives wellness benefits including: increased alertness, enhanced productivity, better mood, and better sleep. More information may be found at www.bioslighting.com or by contacting Day-O-Lite directly. All options for 0-10V control.

BIOS Biological Static
For daytime applications. BIOS Static Biological LED features key BIOS SkyBlue (490nm) for maximum daytime circadian impact.

B30 = 3000K
B35 = 3500K
B40 = 4000K

BIOS Biological Dynamic White
Designed to transition from daytime to evening in a dim-to-warm protocol. The daytime CCT includes full BIOS SkyBlue (490nm) for maximum daytime circadian impact, while the evening spectrum removes BIOS SkyBlue for minimal circadian stimulus after hours.

B30D = 3000K-2700K
B35D = 3500K-3000K
B40D = 4000K-3500K

BIOS Biological Tunable White
Designed to transition from daytime to evening in a tunable white protocol. The daytime CCT includes full BIOS SkyBlue (490nm) for maximum daytime circadian impact, while the evening spectrum removes BIOS SkyBlue for minimal circadian stimulus after hours.

B30T = 3000K-2700K
B35T = 3500K-2700K
B40T = 4000K-2700K

Sensors & Controls

Sensors

AVO = Avi-On Occ/Day
AVM = Avi-On Occ (Microwave)
BNV = BubblyNet Occ/Day
ENC = Encelium Occ/Day
ENL = EnLighted Occ/Day/Temp
LEG = Legrand Occ/Day
ANW = Lutron Athena Occ/Day
VIVE = Lutron Vive Occ/Day
NLT = Acuity nLight Occ/Day
NXC = Current NX Occ/Day
ESN = Philips EasySense Occ/Day
WVL = Cooper WaveLinx Occ/Day

Wireless Control

CAS = Casambi

Sensors and control options to be commissioned wirelessly in the field by qualified controls personnel with applicable apps (by others).

Other Options

Other sensor and wireless control options are available. Contact factory for details.

[1]Tunable white may be controlled by a number of dimming protocols as shown.

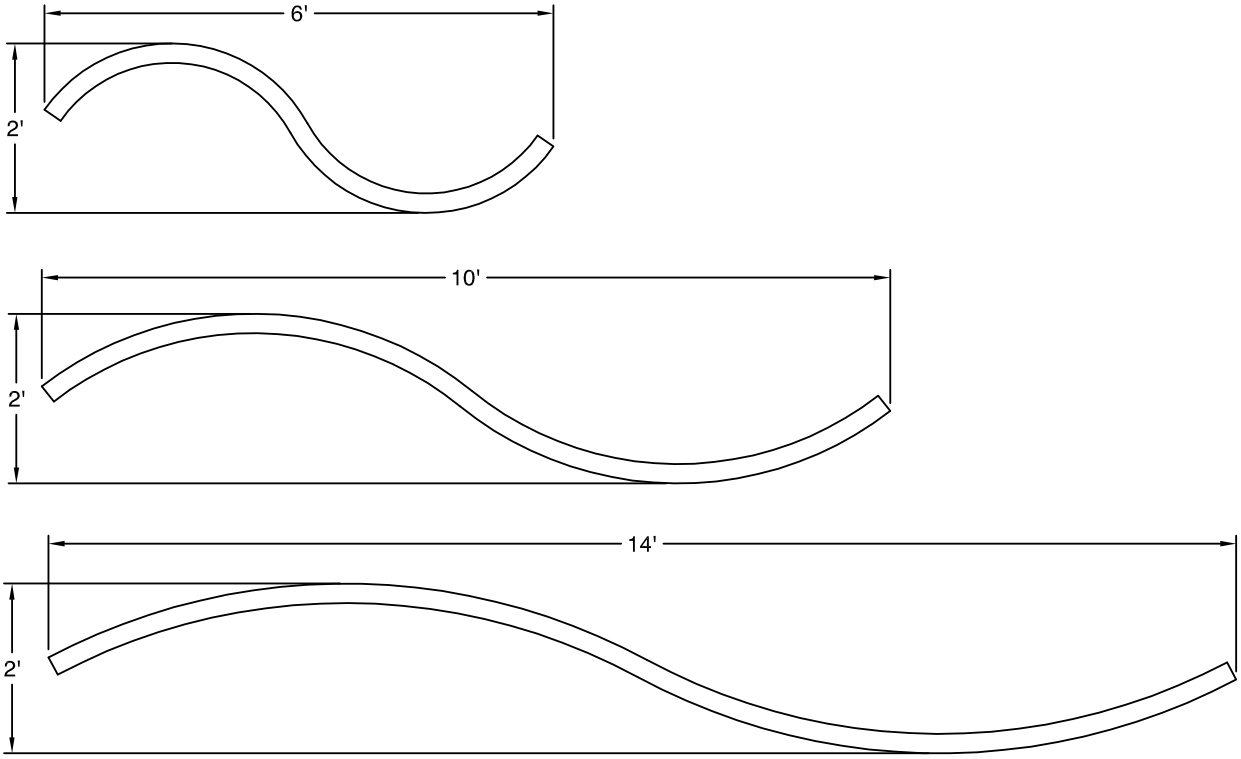
[2]Dim-to-Warm mimics incandescent dimming by warming the CCT from 6500K to 2700K as light levels are dimmed.

[3]All RGB, RGBW and RGBWW options for DMX control (by others). 80 CRI standard.

[4]Single colors are constant voltage LEDs. Dimming requires ELV controller (by others).

[5]White limited to 100L/ft.

Standard Sizes

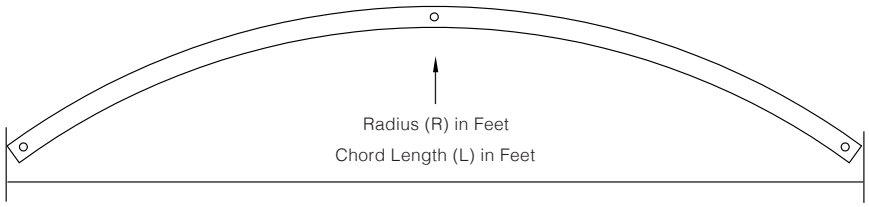


Custom Size Configuration

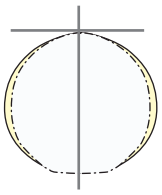
ARC-24S may be ordered in virtually any radius and length and is easy to specify. Simply use order code "XRL" where XR = Radius, and L = Length in feet. Day-O-Lite will design length to closest LED module length and provide drawings for approval.

Examples:

30' radius, 20' length = 30R20
10' radius, 12' length = 10R12
6' radius, 4' length = 6R4



Photometry



ARCL-24S-D

SIZE	LO LUMENS	LO WATTS	LO LPW	SO LUMENS	SO WATTS	SO LPW	HO LUMENS	HO WATTS	HO LPW
26	3273	35	94	4356	46	95	5465	56	98
210	4921	56	88	6547	72	91	8184	88	93
214	5885	76	77	7845	98	80	9810	120	82

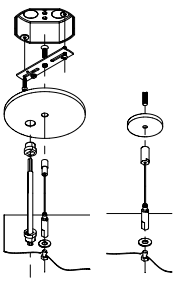
3500K @ 80CRI, 4/ft,100% direct distribution, DP lens (download IES files @ www.dayolite.com).

Use the following multipliers for other CCTs: 2700K x 0.96, 3000K x 0.98, 4000K x 1.02, 5000K x 1.03.

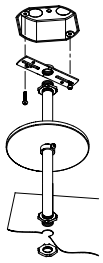
Standard Suspensions

Standard suspension options include adjustable self-locking aircraft cables (AC) and rigid pendant stems (PD). AC assembly is 48" x 1/16" with a 5" feed canopy and 2" suspension canopies. 60" 18 gauge power and 22 gauge dimming control SJT feed.

PD assemblies are 5/8" dia. (or 3/8" IP) hollow stem for power feed by others, 24" is standard. Consult factory for longer suspension lengths and other mounting options.

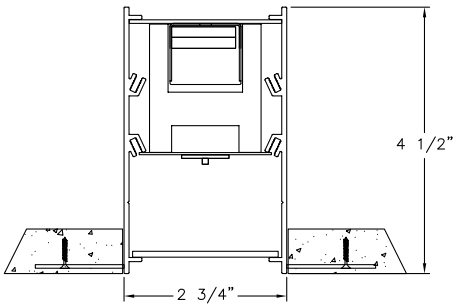


AC = Aircraft Cable

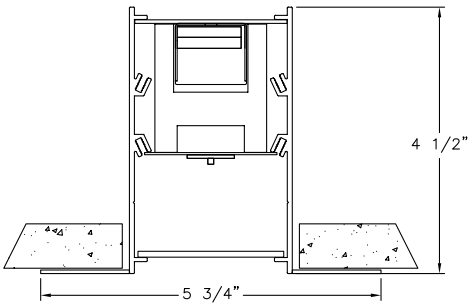


PD = Pendant Stem

Additional Mounting Options



Trimless (TRL)



Flange (F)

Specifications

CONSTRUCTION: Extruded aluminum housing. 20 gauge cold rolled steel internal components.

REFLECTOR: Die-formed steel finished in highly reflective baked white enamel with pre-finished reflective LED tray.

OPTICS: LED optimized diffuse polycarbonate lens is standard, w/clear acrylic dust covers indirect.

LED: Static white LED modules in 27/30/35/40 & 50K CCT, 80/90CRI. Lumen maintenance minimum L_{70}= 50,000 hours. 3 SDCM color consistency. BIOS SkyBlue, RGB, RGBW, RGBWW, Advanced Color, Tunable White and Dim-to-Warm options available; field replaceable.

DRIVER: Standard driver is Class 2 AOC 0-10V to 1%, Dim-to-Off available. 120/277V input, PF > 90%, THD < 20 @ 120V. DMX, DALI & Lutron protocols available. All drivers prewired for connection to control system (by others), field replaceable.

MOUNTING: Standard options include adjustable self-locking aircraft cables (AC), and rigid pendant stems (PD). AC assembly is 48" x 1/16" with a 5" feed canopy and 2" suspension canopies. 18 gauge power and 22 gauge dimming control SJT feed. May also be surface mounted or installed in drywall ceilings.

FINISH: Housing and components finished in baked white enamel. Canopies and pendant stems are white enamel unless otherwise specified.

CERTIFICATION: Luminaires are cETLus listed conforming to UL STD. 1598 and certified to CSA STD C22.2 NO. 250.0. Suitable for dry & damp locations. Union Made in the United States of America. I.B.E.W., BAA compliant, Declare Red List Approved.

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