DAY-O-LITE

Quad Series | QDL-24-D Acoustic

Date	Notes
Project	
Type Qty	

Features

Combines noise control and general illumination.

Durable extruded aluminum, fully welded housing.

LED optimized optics for smooth, efficient illumination.

Individual fixtures, continuous runs or custom patterns.

Programmable driver for custom lumen packages.

0-10V dimming to 1% standard. Dim-to-off available.

DMX, Lutron and DALI protocols also available.

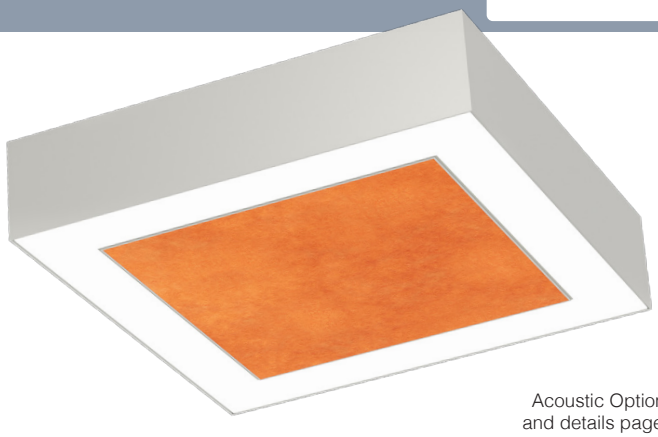
Sensor Ready for wireless Smart Lighting Solutions.

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

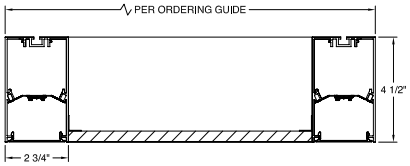
Advanced Color (RGBW) w/pixel control to 5".

Bios SkyBlue™ circadian solutions available.

Declare Red List Approved.



Acoustic Options and details page 3.



Ordering Guide

Declare. BAA

MODEL	OPTICS	LED[1]	LUMENS[2]	SIZE	MOUNTING[3]	FINISH	OPTIONS
QDL-24-D	**FL**						
QDL-24-D Direct Acoustic	FL = Flush Opal Acrylic, snap-in **Standard**	**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.	LO = Low Output SO = Standard Output HO = High Output **CUSTOM** For custom lumens specify value < HO.	14 = 14" 20 = 20" 25 = 25" 31 = 31" 36 = 36" 42 = 42" 47 = 47" See 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** FWH = Flexible Wiring Harness

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

[2]Lumens at 80CRI, 3500K, FL lens. Photometry page 5.

[3]See page 5 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.

HOW TO SPECIFY

1) Select color code from color swatches.

2) Enter color code in Options section of Ordering Guide on page 1.

SPECIFICATIONS

Class A Fire Rating

1.6 Noise Reduction Coefficient (NRC)

Moisture and Mold Resistant

UV Fade Resistant

100% Recyclable

ADDITIONAL INFORMATION

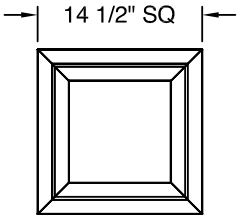
Smoke, Pewter and Slate are standard colors; consult factory for lead-times on other colors including wood grains. Acoustic panels ship affixed to luminaires and are held in place by stop-blocks and double-sided tape to prevent bowing. On site removal may result in damage and void warranty. Fixtures must be stored and installed in an interior dry location at a minimum of 52F.

A NOTE ON SOUND ABSORPTION

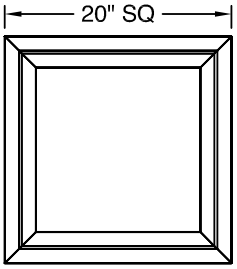
Per ASTM C423 there is no standard way to calculate sound absorption coefficients of non-standard shapes, sizes or spacing of material. Day-O-Lite's acoustic fixtures are tested using ASTM E795-16 Standard "Practices for Mounting Test Specimens During Sound Absorption Test", resulting in a noise reduction coefficient (NRC) unique to the test setup. When comparing sound suppressing materials those with a higher NRC will absorb more sound than those with a lower NRC,
assuming the same test method is employed.

MD = Mandarin

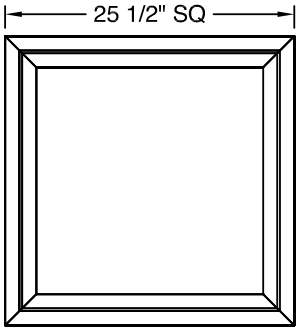
Dimensions



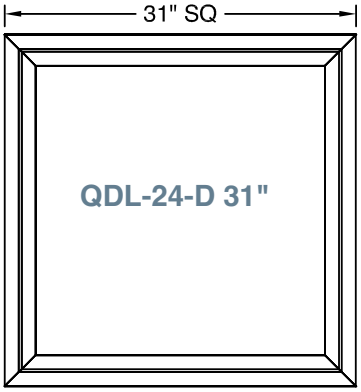
QDL-24-D 14"

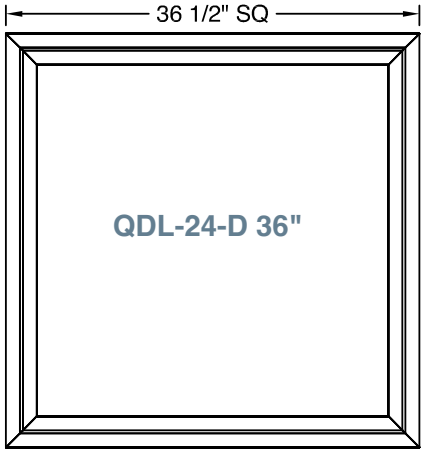


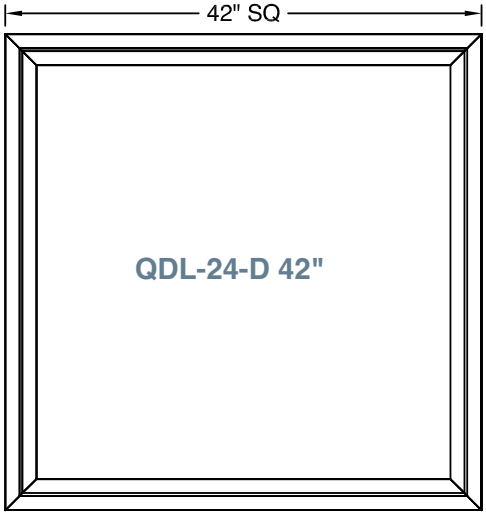
QDL-24-D 20"

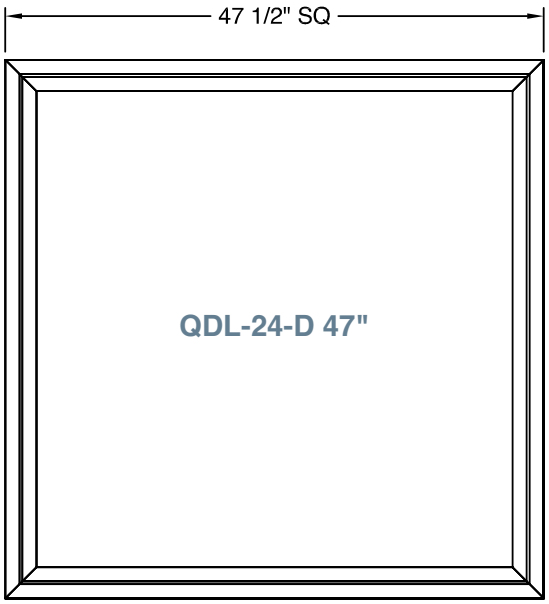


QDL-24-D 25"

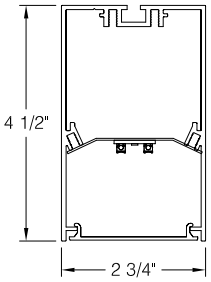








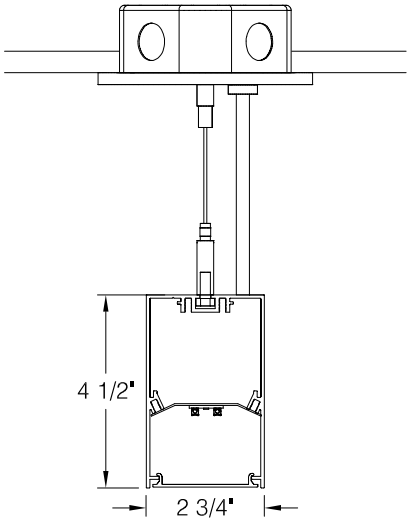
Optics



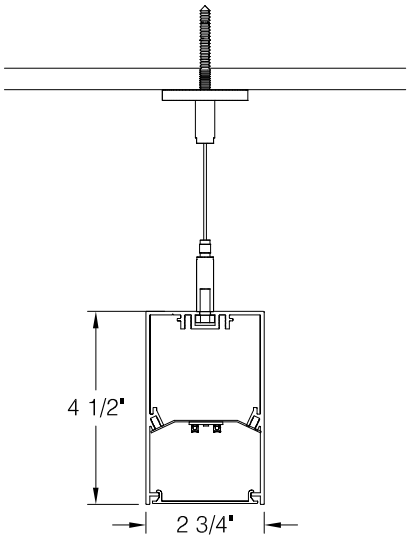
FL
Flush
Lens

Mounting

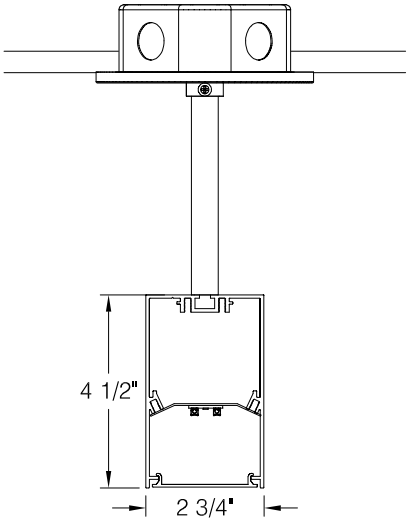
Standard suspension options include adjustable self-locking aircraft cables (AC) and rigid pendant stems (PD). AC assembly is 48" x 1/16" with a 5" feed canopy and 2" suspension canopies. 60" 18 gauge power and 22 gauge dimming control SJT feed. PD assemblies are 5/8" dia. (or 3/8" IP) hollow stem for power feed (by others); 24" is standard. Consult factory for longer suspension lengths and other mounting options.



AC
Feed Canopy 5"



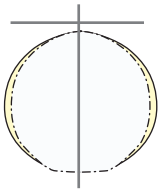
AC
Non-Feed Canopy 2"



PD
5" Canopies Only

AC-PF = Replacement Power Feed w/cable Kit w/5" canopy.
AC-NF = Replacement Non/Feed Kit w/2" canopy.
Consult factory for custom lengths and either 5 or 6 wire power feeds.

Photometry



SIZE	LO LUMENS	LO WATTS	LO LPW	SO LUMENS	SO WATTS	SO LPW	HO LUMENS	HO WATTS	HO LPW
14"	2005	20	100	2669	26	103	3338	32	105
20"	3007	30	100	4005	39	103	5015	48	105
25"	4045	40	101	5401	52	104	6755	63	107
31"	5049	50	101	6738	65	104	8409	79	106
36"	6063	60	101	8083	77	104	10,102	95	106
42"	7074	70	101	9423	91	104	11,792	111	106
47"	8100	80	101	10,823	103	105	13,517	127	106

3500K @ 80CRI, 100% direct distribution, FL lens. Use the following multipliers for other CCTs: 2700K x 0.96, 3000K x 0.98, 4000K x 1.02, 5000K x 1.03. IES files @ www.dayolite.com.

Specifications

ACOUSTIC PANELS: 1/2" thick, 100% recyclable polyester material, Class A fire rating, moisture, mold and UV fade resistant.

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

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

OPTICS: LED optimized Flush Opal Acrylic (snap-in) Direct, Clear Acrylic (lay-in) dust covers Indirect standard. Flush Opal Acrylic (snap-in) Direct, Satin Ice Acrylic (lay-in) Indirect optional.

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 and Tunable White options available. Field replaceable.

DRIVER: Standard driver is Class 2 AOC 0-10V to 1%, 120/277V input, PF > 90%, THD < 20 @ 120V. Additional dimming protocols available. Drivers prewired from factory 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. PD assemblies are 5/8" dia. (or 3/8" IP) hollow stem for power feed by others, 24" is standard.

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

CERTIFICATION: 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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