



# Affinity Series | AFNL 2x2

Date		Notes
Project		
Type	Qty	

## Features

Adjustable drop lens troffer. Flush to 7" drop in 1" increments. May be field adjusted to 1/2" increments.

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.

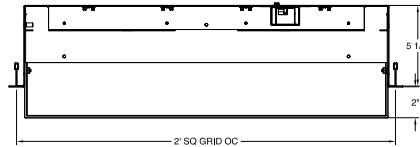
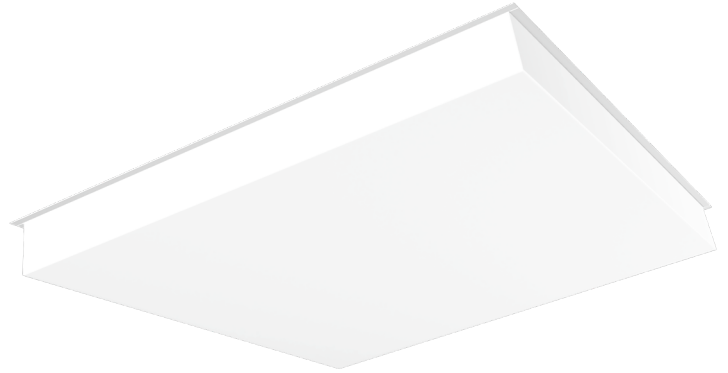
Sensor Ready for wireless Smart Lighting Solutions.

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

Bios SkyBlue™ circadian solutions available.

Compatible with Armstrong® ceiling systems.

**Declare Red List Approved.**



2" Len Drop Shown

## Ordering Guide



MODEL	OPTICS	CCT <sup>1</sup>	LUMENS <sup>2</sup>	SIZE	MOUNTING <sup>3</sup>	FINISH	OPTIONS
<b>AFNL-D</b>	<b>WOA</b>			<b>22</b>			
AFNL-D Direct	WOA = White Opal Acrylic lens  00 = Flush  10 = 1" drop  20 = 2" drop  30 = 3" drop  40 = 4" drop  50 = 5" drop  60 = 6" drop  70 = 7" drop	<b>STATIC WHITE</b> 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 50 = 5000K  <b>BIOS SkyBlue</b> Spectrally optimized circadian solutions.  <b>TUNABLE WHITE</b> (2700K-6500K) 2DIM10 = for 0-10V 2DMX = for DMX 2ESN = for Philips 2CAS = for Casambi 2LUT = for Lutron  <b>DIM-TO-WARM</b> DTW = Dim-to-Warm  <b>RGB &amp; WHITE</b> RGB = RGB RGBW = RGBW RGBWW = RGBWW (2700K-6500K)	<b>STANDARD</b> LO = 2235 (20W, 111LPW)  SO = 2863 (27W, 106LPW)  HO = 3700 (35W, 100LPW)  For lens in flush lens position. See page 2 for performance at other lens depths.  <b>CUSTOM</b> For custom lumens specify value < HO.	22 = 2x2	G = Grid 15/16" T-Bar  MG = Mini Grid 9/16" T-Bar  SG = Slot Grid  SGF = Slot Grid Flush  XG = Interlude  XGF = Interlude Flush   TGF = Tegular Flush 15/16" T-Bar  XGF = Tegular Flush 9/16" T-Bar  S = Surface  F = Flange	W = White  CC = Custom Color	<b>DIMMING DRIVERS</b> DIM10 = 0-10V (1%) <b>Standard</b> DTO = 0-10V (Dim-to-Off) DIMST = 0-10V Step Dimming DIMSR = DALI Sensor Ready (5.0%) DALI = DALI (5.0%) DMX = DMX  <b>LUTRON™ DIMMING DRIVERS</b> LDE1 = Hi-Lume 1% EcoSystem LD2 = Digital 1% (DALI-2) L3DA3W = Hi-Lume 1% 3-Wire  <b>SENSORS &amp; CONTROLS<sup>4</sup></b> AVO = Avi-On Sensor AWNS = Lutron Athena Sensor ESN = EasySense Sensor CAS = Casambi Wireless Control  <b>EMERGENCY &amp; OTHER<sup>5</sup></b> EMC = Emergency Circuit EPC4 = 4W Emergency Battery Pack EPC6 = 6.5W Emergency Battery Pack EPC10 = 10W Emergency Battery Pack EPC12 = 12W Emergency Battery Pack  <b>WIRING &amp; OTHER</b> FWH = Flexible Wiring Harness DWH = DMX Wiring Harness FK22 = Flange Kit

<sup>1</sup>All LED, BIOS, Tunable White, DTW, and RGB/W options and Ordering Codes page 2.

<sup>2</sup>Lumens at 80CRI, 4000K, SI lens. Photometry page 3.

<sup>3</sup>See page 3 for all mounting options.

<sup>4</sup>All Sensor & Control options page 2. Sensors remote mount only.

<sup>5</sup>EPC6 is standard unless otherwise specified. EPC not for DMX drivers.

**BAA** letter of compliance available at [www.dayolite.com](http://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<sup>1</sup>**  
(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<sup>2</sup>**

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

**RGB/W<sup>3</sup>**

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**

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

**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](http://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  
 WVW = Cooper WaveLinX Occ/Day

**Wireless Control\***

CAS = Casambi

\*Sensors for remote mount only.

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

**Other Options**

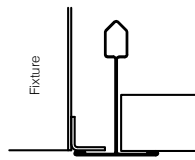
Other sensor and wireless control options are available. Contact factory for details.

<sup>1</sup>Tunable white may be controlled by a number of dimming protocols as shown.

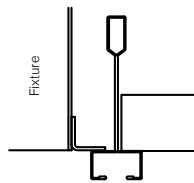
<sup>2</sup>Dim-to-Warm mimics incandescent dimming by warming the CCT from 6500K to 2700K as light levels are dimmed.

<sup>3</sup>All RGB, RGBW and RGBWW options for DMX control (by others). 80 CRI standard.

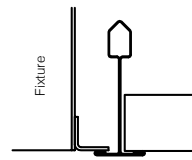
## Grid Ceiling Mounting Options



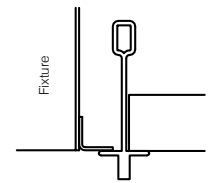
**G**  
15/16" T-Bar



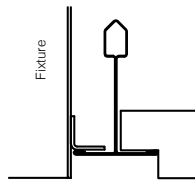
**MG**  
9/16" T-Bar



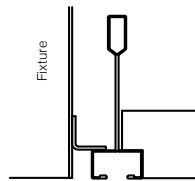
**SG**  
Slot Grid



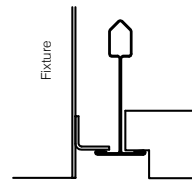
**XG**  
Interlude



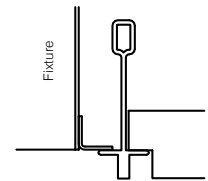
**TGF**  
15/16" Tegular  
Flush



**MTGF**  
9/16" Tegular  
Flush

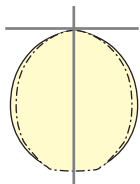


**SGF**  
Slot Grid  
Flush



**XGF**  
Interlude  
Flush

## Photometry



AFNL-D-**00-40-SO-22**  
(flush lens)

CCT: 4000K  
Watts: 27  
Lumens: 2979  
LPW: 110

AFNL-D-**20-40-SO-22**  
(2" lens drop)

CCT: 4000K  
Watts: 27  
Lumens: 2863  
LPW: 106

AFNL-D-**50-40-SO-22**  
(5" lens drop)

CCT: 4000K  
Watts: 27  
Lumens: 2739  
LPW: 101

AFNL-D-**70-40-SO-22**  
(7" lens drop)

CCT: 4000K  
Watts: 27  
Lumens: 2669  
LPW: 99

40000K @ 80CRI, SI lens.

Use the following multipliers for other CCTs: 2700K x 0.94, 3000K x 0.96, 3500K x 0.98, 5000K x 1.02. IES files @ [www.dayolite.com](http://www.dayolite.com)

## Specifications

**CONSTRUCTION:** Die-formed, 20-gauge, cold rolled steel.

**REFLECTOR:** Highly reflective, die-formed steel finished in baked white enamel is standard.

**OPTICS:** LED optimized white opal acrylic. Specifiable in 1" drop increments. May be field adjusted to 1/2" increments if desired.

**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. Tunable White and Dim-to-Warm options available.

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

**MOUNTING:** Standard installation is in an exposed inverted T-bar ceiling. Fixtures are supplied with four support brackets for additional support to T-bar. May also be installed in a plaster ceiling (F/TRL mounting option with Flange); field replaceable.

**FINISH:** Housing and components finished in baked white enamel.

**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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