DAY-O-LITE

Orbit Series | ORBL-23-D/I

Date	Notes
Project	
Type	**Qty**
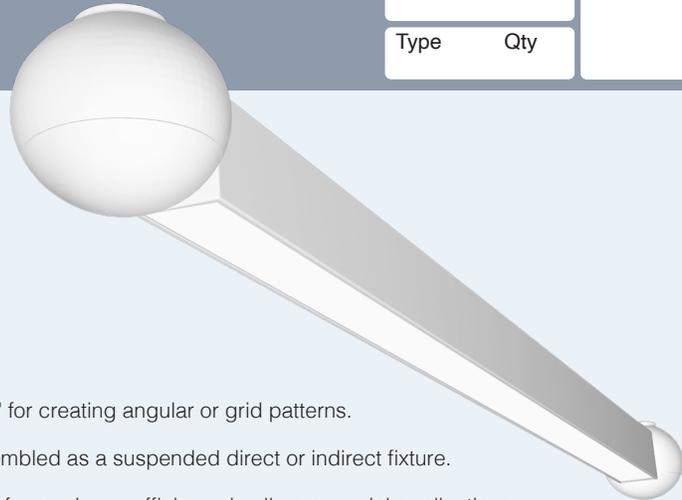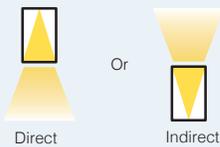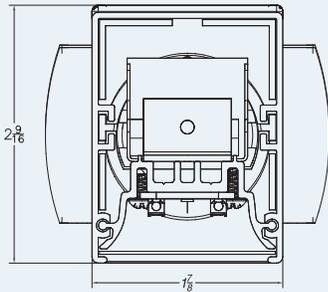
Direct   Or   Indirect

Features

Unique 4-way "Orbits" for creating angular or grid patterns.

Orbit-23 may be assembled as a suspended direct or indirect fixture.

LED optimized optics for maximum efficiency in all commercial applications.

High efficiency programmable driver for custom lumen packages. 0-10V dimming to 1%.

High efficacy LEDs in 80 or 90 CRI; two or three channel tunable white; five channel tunable color.

Ordering Guide

MODEL	OPTICS	CCT¹	LUMENS²	LENGTH³	MOUNTING⁴	FINISH	OPTIONS
ORBL-23-D/I							
Orbit-23-D/I May be assembled for Direct or Indirect Distribution	ACR = LED Optomized Acrylic CA = Clear Acrylic dust covers (for Indirect applications if desired).	27 = 2700K 80CRI 30 = 3000K 80CRI 35 = 3500K 80CRI 40 = 4000K 80CRI 50 = 5000K 80CRI 90 CRI add "9" Ex: 940 = 4000K @ 90 CRI **TUNABLE WHITE & COLOR¹** 2-Channel White 2DIM10 = for 0-10V 2DALI = for DALI 2DMX = for DMX 2PSQ = for Lutron 2SNS = for Signify 2CAS = for Casambi 3-Channel White 3DML = for DLM 3-Channel Color RGB 4-Channel Color/White RGBW 5-Channel Color/Warm White/Cool White RGBWW	LO = 375/ft (4W/ft, 111LPW) SO = 500/ft (5W/ft, 111LPW) Consult factory for additional lumen packages. All values nominal.	2 = 2 ft 3 = 3 ft 4 = 4 ft 5 = 5 ft 6 = 6 ft 7 = 7 ft 8 = 8 ft For other enter row length (e.g. 48 = 48 ft)	AC = Aircraft Cable	W = White CC = Custom Color AMW = Anti-Microbial White	**DIMMING DRIVERS** DIM10 = 0-10V (1%) - **Standard** DIMSR = 0-10V (5.0%) Sensor Ready DIMST = Step Dimming (40%/100%) DALI = DALI (5.0%) **LUTRON™ DIMMING DRIVERS** LDE1 = Hi-Lume™ 1% EcoSystem™ LDE5 = 5-Series 5% EcoSystem™ L3DA3W = Hi-Lume™ 1% 3-Wire LTEA2W = Hi-Lume 1% 2-Wire 120V **SENSORS & CONTROLS** ESN = Philips™ EasySense DAY = Daylight Harvesting OCC = Occupancy Sensor CAS = Casambi Bluetooth control VDO = Vive Sensor by Lutron **EMERGENCY** EMC = Emergency Circuit GTD = Generator Transfer Device EPC4 = 4W Emergency Battery Pack EPC7 = 7W Emergency Battery Pack EPC10 = 10W Emergency Battery Pack EPC12 = 12W Emergency Battery Pack Not all options integral to ORBIT-23. Consult factory.

¹Tunable white, tunable color and RGB/W options detailed on page 5.

²Delivered Lumens are Standard Ouput (SO) and Low Output (LO) at 80+CRI 4000K CCT. Use the following multiplier to estimate delivered lumens at other CCTs: 2700K = 0.94, 3000K = 0.96, 3500K = 0.98, 5000K = 1.02. All values nominal. See page 3 for photometry.

³See page 2 for actual fixture lengths and suspension locations.

⁴See page 3 for suspension details.

Linear Sections and Suspension Location

NOMINAL LENGTH	ACTUAL LENGTH	SUSP. 1 O.C.	SUSP. 2 O.C.	SUSP. 3 O.C.
4'	4' 6"	4' 2"		
8'	8' 4"	8'		
12'	16' 6"	8'	4' 2"	
16'	16' 4"	8'	8'	
20'	20' 6"	8'	8'	4' 2"
24'	24' 4"	8'	8'	8'

Individual fixtures and rows are joined with included aligner hardware. Fixtures to 8' and rows to 24', and suspension locations are shown below.

Continuous rows longer than 8' and patterns, including EPC/EMC and sensor locations must be approved prior to manufacturing. See page 4 for pattern suggestions.
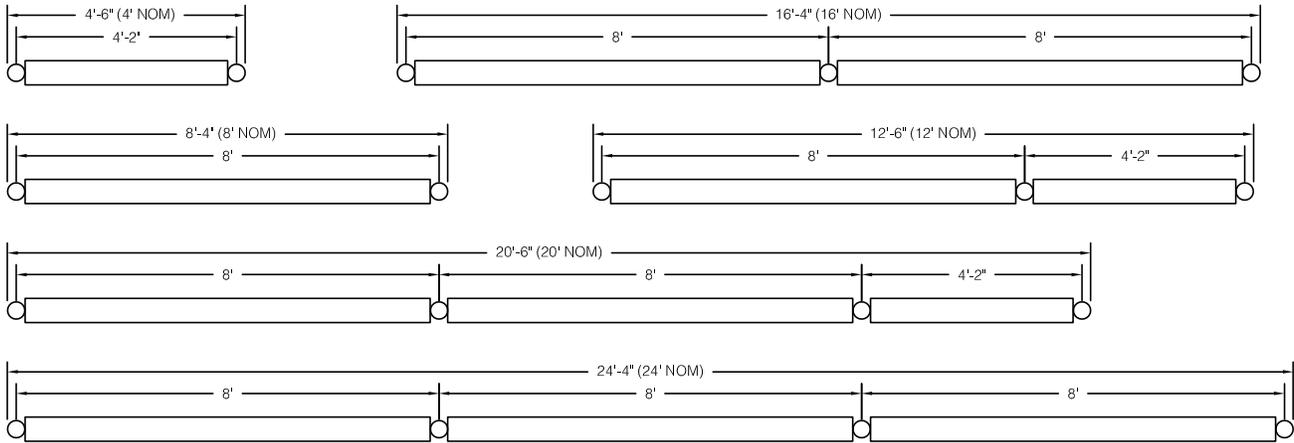

EPC/EMC Locations

EPC will control entire length of individual fixtures. Individual fixtures of differing lengths will deliver the same lumens under EPC power (a 4' fixture will deliver the same total lumens over half the length of an 8' fixture). EMC controlled individual fixtures will deliver lumens per foot as originally specified, unless dimmed at time of power loss. Consult factory for EMC dimming override device.

4' Individual

8' Individual

For individual fixtures to 8' EPC/EMC will power entire fixture.
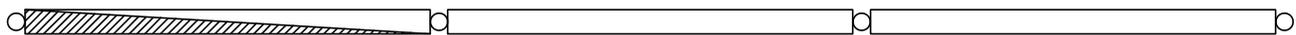
24' Row (3x8')   For continuous rows longer than 8' one EPC/EMC will be located in the feed section (end-left) of the row as shown below.
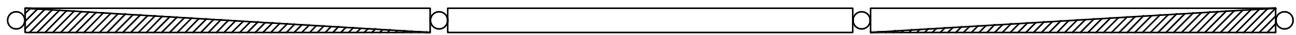
24' Row (3x8')   If two EPC/EMC's are required their default locations will be in the feed section (end-left) and last section (end-right) as below.

24' Row (3x8')   Custom placement of one or more EPC/EMC's must be clearly identified during ordering.

Assembly & Suspension Detail

LED FIXTURE

LED FIXTURE

ORBIT CONNECTOR
BLANK

ORBIT
CONNECTOR BOTTOM

ORBIT CONNECTOR
BLANK

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.
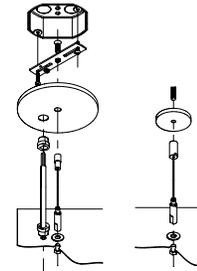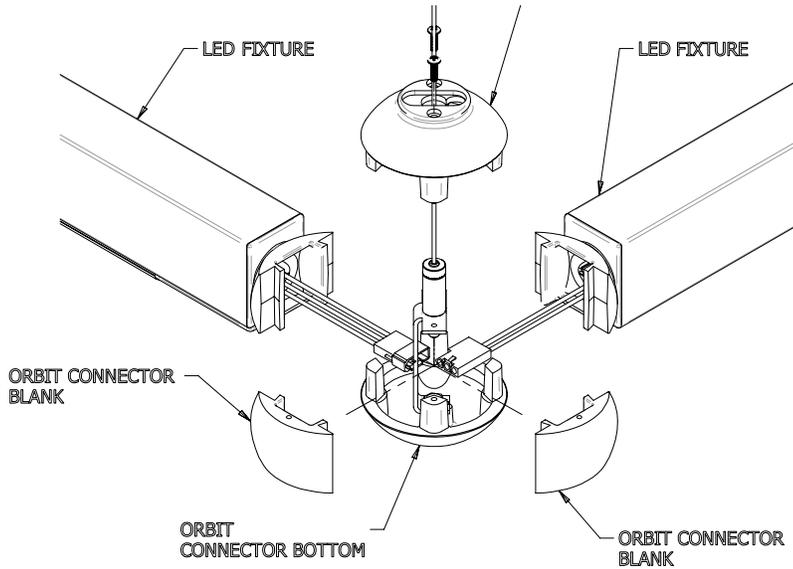
AC = Aircraft Cable

Photometry

ORBL-23-D-ACR-40-LO-4
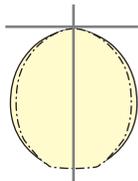
4000K CCT
WATTS: 14
LUMENS: 1500
LPW: 111
Distribution:
100% Direct

ORBL-23-D-ACR-40-SO-4
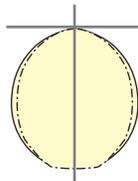
4000K CCT
WATTS: 18
LUMENS: 2000
LPW: 111
Distribution:
100% Direct

ORBL-23-I-ACR-40-LO-4
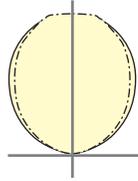
4000K CCT
WATTS: 14
LUMENS: 1500
LPW: 111
Distribution:
100% Indirect

ORBL-23-I-ACR-40-SO-4
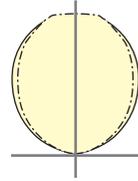
4000K CCT
WATTS: 18
LUMENS: 2000
LPW: 111
Distribution:
100% Indirect

Pattern Suggestions
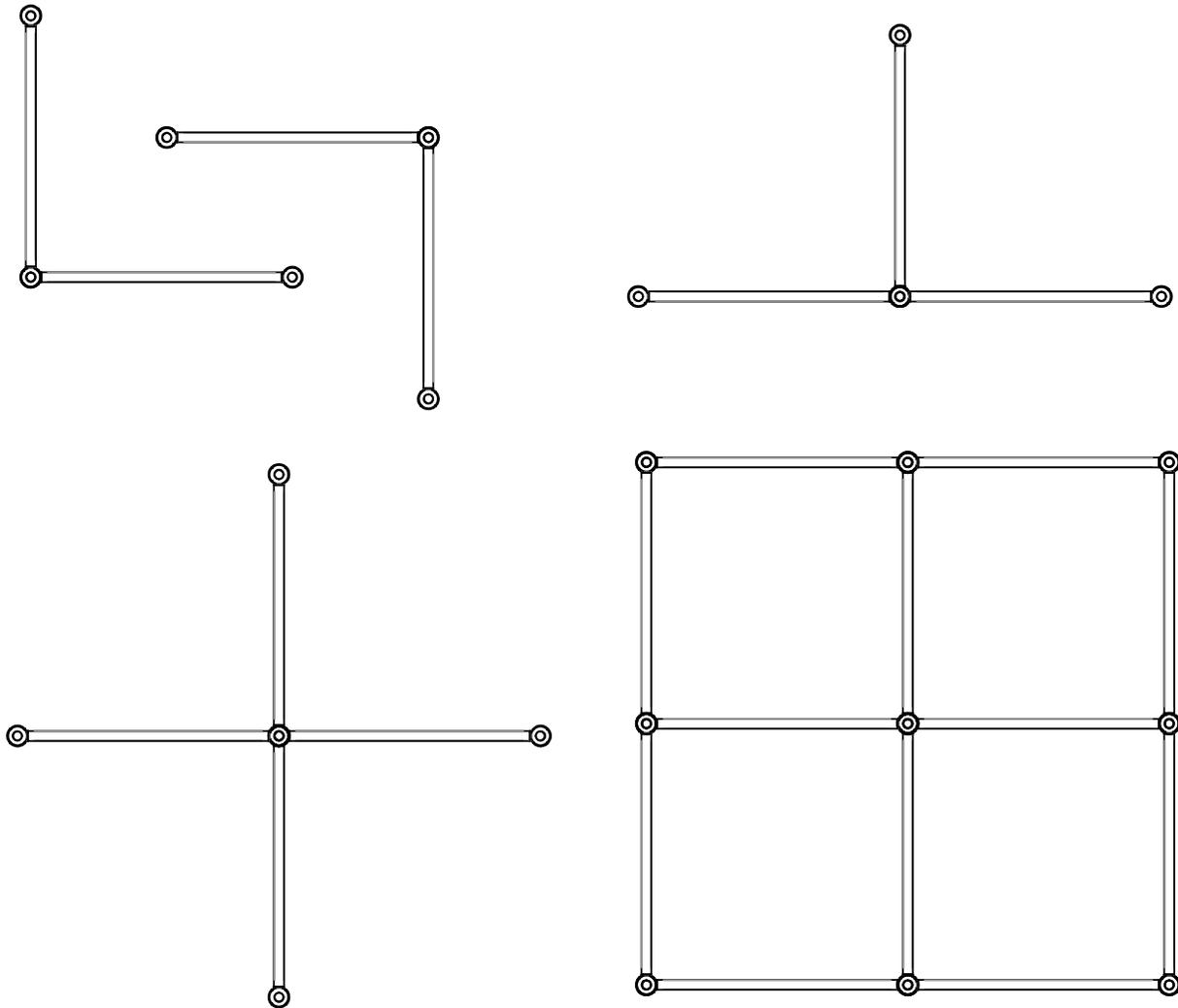
Specifications

CONSTRUCTION: Extruded aluminum housing w/cast aluminum "Orbits".

REFLECTOR: Die-formed steel finished in highly reflective baked white enamel.

OPTICS: LED optimized Acrylic (ACR) lens is standard. Clear Acrylic (CA) dust covers also available for indirect applications.

LEDS: LED modules in 30/35/40 & 50K CCT, 80 CRI (90CRI available). Lumen maintenance minimum L_{70}= 1000,000 hours. 3 SDCM color consistency.

DRIVER   Standard driver is Class 2 AOC 0-10V to 1%, 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 options include adjustable self-locking aircraft cables (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.

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 locations. Union Made in the United States of America. I.B.E.W. RoHS compliant.

DAY-O-LITE

Day-O-Lite offers a variety of tunable white and tunable color options for a range of human centric applications and budgets. It is recommended that a recognized authority on the benefits and best practices of tunable white be consulted prior to specification. As a rule, fewer channels will provide a basic level of performance for budget conscious applications. Conversely, an increased number of channels, a wider CCT range, higher CRI and more precise color consistency may be more appropriate depending on the application and desired results.

HOW TO SPECIFY
Select from the various channel/control options below and insert desired **Ordering Code** into the **COLOR TEMP** column of the Ordering Guide on page 1. No need to add a dimming option as the codes include the chosen protocol.

2-CHANNEL TUNABLE WHITE OPTIONS

2700K - 6500K CCT range

1000L/ft LED modules @ 4000K

80+ CRI w/3SDCM color accuracy

10W/ft. nominal power

Ordering Codes

2DIM10	for 0-10V control
2DALI	for DALI control
2DMX	for DMX control
2PSQ	for Lutron Quantum control
2SNS	for control via Signify SNS sensors
2CAS	for control via Casambi BLE wirelss devices

LEGRAND BLANCO MULTI-CHANNEL OPTIONS

Blanco-2

Blanco-2 mixes two channels of white LEDs to approximate the blackbody curve for tunable white applications. CCT and intensity may be adjusted with controls by others.

3000K-5000K CCT range

1000L/ft LED modules @ 4000K

90+ CRI w/2SDCM color accuracy

10W/ft. nominal power

Ordering Codes

B2DLM   for DLM control

Blanco-3

Blanco-3 mixes three channels of white LEDs across a wider range of color temperatures for more demanding tunable white applications. CCT and intensity may be adjusted with controls by others.

2700K-6500K CCT range

1000L/ft. LED modules @ 4000K

90+ CRI w/SDCM color accuracy

10W/ft. nominal power

Ordering Codes

B3DLM   for DLM control

RGB & RGBW TUNABLE COLOR

RGB = Red, Green, Blue color mixing LEDs

RGB/W = Red, Green, Blue + White of chosen CCT

Dimming form 100% to 1%.

90+ CRI w/3SDCM color accuracy

10W/ft. nominal power

Notes:

RGB requires an RGB DMX or DALI controller (by others)

RGBW requires an RGBW DMX or DALI contoller (by others)

All channels on one driver is standard, if isolating the White from the RGB channels is desired please consult factory.

RGB and RGBW are not recommended for tunable white applications.

Ordering Codes

RGB	for DMX control
RGB27	for DMX control w/2700K white
RGB30	for DMX control w/3000K white
RGB35	for DMX control w/3500K white
RGB40	for DMX control w/4000K white
RGB50	for DMX control w/5000K white
RGB65	for DMX control w/6500K white

Add Suffix **DAL** for DALI Control to codes above.

5-CHANNEL TUNABLE WHITE AND COLOR

RGBWW = Red, Green, Blue, Warm White, Cool White.

Consult factory for RGBWW tunable white/color options.

Day-O-Lite makes no claims as to the psychological or physiological efficacy of the white color tuning options offered herein.