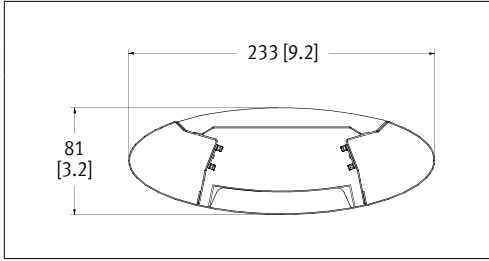


# Orbit II O2DS

LED . Pendant



CAT #:
PREP BY:
DATE:
PROJECT:
TYPE:
NOTES:



## ORDERING LOGIC

O2DS		Optics		SBO		LL / Driver		Circuitry		Mounting		Voltage		IC					
Color Temp		Length		Up		Down		Finish		Circuitry		Mounting		Voltage					
<b>Color Temp</b>		<b>Optics Up</b>		<b>Light Level (LL) / Driver</b>		<b>Circuitry</b>		<b>Integrated Control (IC)</b>											
2L30K = 3000K		P = Perforated		<b>Fixture Lumens</b> *Light level measured at 3500K. Add 3% lumen output for 4000K or subtract 2% lumen output for 3000K.		1 = 1 Circuit		1 = 120 V											
2L35K = 3500K		C = Clear Dust Cover				EM = Emergency/Night Light		2 = 277 V											
2L40K = 4000K		_ = Open Top (leave space empty)				B = Battery		3 = 347 V											
		<b>Optics Down</b>				<b>Mounting</b>		4 = UNV (120-277 V)											
<b>Length</b>		SBO = Solid Cross Blade Baffle w/ Opal Overlay		<table border="1"> <thead> <tr> <th>0-10V Dimming (Standard)</th> <th>3500k</th> </tr> </thead> <tbody> <tr> <td>L1</td> <td>= 3123</td> </tr> <tr> <td>L2</td> <td>= 3983</td> </tr> <tr> <td>L3</td> <td>= 5704</td> </tr> <tr> <td>L4</td> <td>= 10932</td> </tr> </tbody> </table> Based on 4ft sections with Open Top.		0-10V Dimming (Standard)	3500k	L1	= 3123	L2	= 3983	L3	= 5704	L4	= 10932	PA = Pendant Aircraft Cable		<b>Integrated Controls (IC)</b>	
0-10V Dimming (Standard)	3500k																		
L1	= 3123																		
L2	= 3983																		
L3	= 5704																		
L4	= 10932																		
4 = 4 ft		<b>Finish</b>		PT = Pendant Aircraft Cable for T-Bar		_ = None (leave space empty)													
8 = 8 ft		W = White		SS = Solid Stem		D = Daylight Sensor													
R = Continuous Rows (Consult factory)		C = Custom Finish Specify RAL#:		Select HANGER LENGTH and HANGER FINISH on p2		O = Occupancy Sensor													
						DO = Daylight/Occupancy Sensor													

## SPECIFICATIONS

Due to the Continuous Improvement Policy at Metalumen, we reserve the right to change our specifications without notice.

**Housing:** Precision-formed 22 gauge steel bodies with die cast end-caps allow optimal performance dust covers keeps fixtures and lamps clean.

**Optical System:** Computer modeled, formed steel white ballast covers double as reflector system providing wide, horizontal indirect distribution. Precision reflectors allow for superior efficiencies of luminous performance.

**CRI:** 83 (3500K)

**Lumen Maintenance:** At an ambient

operating temperature of 25°C the LED lifetime expectancy => 50 000hrs at L70.

**Finish:** White, baked, powder coated polyester finish. 91% reflectance. For custom finish, consult factory.

**Weight:** 2.1 kg/300mm [ 4.6 lb/ft ]

**Mounting:** Pendant: Aircraft cable field adjustable is standard with Easy Adjust Quick Connect Cable Grips that are self-locking tamper resistant (contact factory for custom lengths). All mounting has been independently tested to meet stringent

safety requirements.

**Solid Stem:** Solid stem 13mm (1/2") OD. Factory prewired with easy wire quick connect sections.

**Drivers:** Metalumen offers dimming drivers as a standard on our entire LED product offering at 0-10V. Dimming is 10%-100% range Power factor is >90% with a Class 2 rating.

**Options:** Consult factory for Lutron driver options:

- L3DAE Hi-lume 1% EcoSystem LED Driver

- L3DA3W Hi-lume 1% 3-wire LED Driver
  - LTEA2W Hi-lume 1% 2-wire LED Driver
  - LDE1 Hi-lume 1% -H EcoSystem LED Driver
  - LDE5 5-Series EcoSystem LED Driver
  - FCJ010 EcoSystem to 0-10V Wireless RF
- Approvals:** Certified to NRTL and IES testing standards. DLC Listed (check QPL for exact listing). All components are UL Recognized or Listed. LM79/LM80 compliant.

**Environment:** Suitable for dry locations.

## WARRANTY

Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Metalumen.

## LUMINAIRE WATTAGE AND OUTPUT SPECIFICATION

Light Level	Wattage	Lumens Delivered	Efficacy (LPW)
L1	27	3123	114
L2	35	3983	114
L3	48	5704	119
L4	96	10932	114

FILE NAME: Orbit\_II\_O2DS\_LED

20170503

APPROVALS: Signature \_\_\_\_\_

Date \_\_\_\_\_

570 Southgate Drive, Guelph, Ontario N1G 4P6  
Mailing Address: P.O. Box 1779 Guelph, Ontario, N1H 6Z9

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**Metalumen**

FEATURES

**COMMERCIAL** // Commercial Lighting - With over 30 years of successful architectural lighting, providing unique concept and installation solutions has become second nature. Metalumen's Start to End Development Process results in unique performance, design and architectural requirements from concept through implementation. Metalumen's Lighting Solutions have been

applied to customer projects requiring: high profile architectural installations; improved energy efficiency; retrofit installations; unique installations. Metalumen can provide top-quality innovative fixtures when and where they are needed and, at the same time, allow the customer to determine their level of involvement in Metalumen's Start to End Development Process.

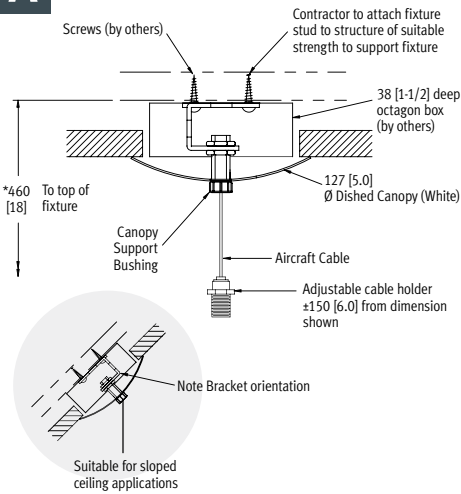
**EDULUMEN** // Educational Lighting Edulumen is a collection of premium luminaires that maximize both the functionality and performance of any educational facility. Based on maximum efficiency, integration of controls and exceptional design, Edulumen will earn high marks for meeting your requirements. Students challenge themselves throughout the day to achieve, and Metalumen is dedicated

to this by creating sustainable environments that foster enhanced educational experiences.

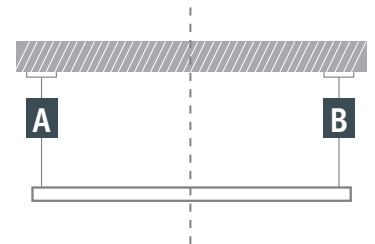
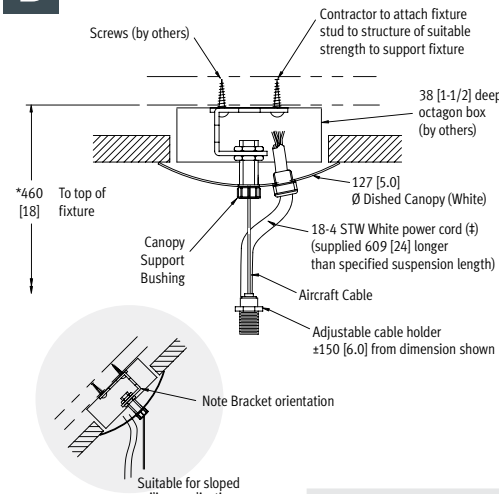
**META** LED boards with a raw efficacy of over 120lm/W, proprietary to Metalumen. A slim LED platform for any of your LED linear application.

HANGAR INFORMATION

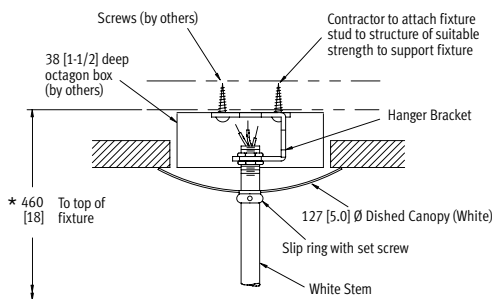
**A** Aircraft Cable



**B** Aircraft Cable & Cord



**Solid Stem**



Select Hanger Length:

SOLID STEM 1/2" OD STANDARD		
Standard supplied length is 18" (460mm). Hangers will be supplied at closest length. All other lengths are considered custom unless otherwise stated.		
	IMPERIAL (in)	METRIC (mm)
<input type="checkbox"/>	12	305
<input type="checkbox"/>	15	380
<input type="checkbox"/>	18	460
<input type="checkbox"/>	21	533
<input type="checkbox"/>	24	610
<input type="checkbox"/>	27	685
<input type="checkbox"/>	30	760
<input type="checkbox"/>	33	840
<input type="checkbox"/>	36	915
<input type="checkbox"/>	39	990
<input type="checkbox"/>	42	1067
<input type="checkbox"/>	45	1145
<input type="checkbox"/>	48	1220
<input type="checkbox"/>	Custom length:	

AIRCRAFT CABLE		
Total adjustment range is 6" up & down for each standard length. All other lengths are considered custom unless otherwise stated.		
	IMPERIAL (in)	METRIC (mm)
<input type="checkbox"/>	12	305
<input type="checkbox"/>	18	460
<input type="checkbox"/>	24	610
<input type="checkbox"/>	30	760
<input type="checkbox"/>	36	915
<input type="checkbox"/>	42	1067
<input type="checkbox"/>	48	1220
<input type="checkbox"/>	54	1372
<input type="checkbox"/>	60	1525
<input type="checkbox"/>	72	1830
<input type="checkbox"/>	96	2440
<input type="checkbox"/>	120	3050
<input type="checkbox"/>	144	3660
<input type="checkbox"/>	Custom length:	

HANGER FINISH	
<input type="checkbox"/>	White Paint (Standard)
<input type="checkbox"/>	Custom Specify RAL#:

PHOTOMETRIC DATA - 3500k

L3

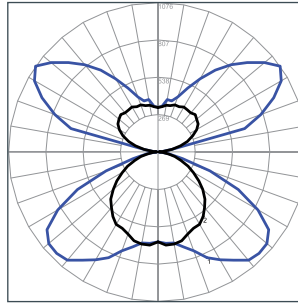
File Name: O2DS-2L35K-4-SB0-L3  
 Luminaire Lumens: 5704  
 Total Watts: 48  
 Efficacy: 119 lms/W  
 Optics Up: Open Top  
 Optics Down: Solid Cross Blade Baffle with Opal Inlay

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method  
 Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
RCR												
0	106	106	106	106	98	98	98	98	81	81	81	
1	97	92	88	85	89	85	82	79	71	69	66	
2	88	80	74	69	80	74	68	64	62	58	54	
3	80	70	63	57	73	64	58	53	54	49	45	
4	73	62	53	47	66	57	50	44	48	42	38	
5	66	55	46	40	61	50	43	37	42	37	32	
6	61	49	40	34	56	45	37	32	38	32	28	
7	56	44	35	30	51	40	33	28	34	28	24	
8	52	39	31	26	47	36	29	24	31	25	21	
9	48	36	28	23	44	33	26	21	28	22	19	
10	45	33	25	20	41	30	24	19	26	20	17	

PHOTOMETRIC CURVE



LUMINANCE DATA (CD/M<sup>2</sup>)

Vertical Angle	Horizontal Angle		
	0	45	90
45	5769	7729	12118
55	5361	7657	13953
65	4843	5940	12168
75	4160	3806	5515
85	3756	2796	2687

CANDLE DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	646.26	646.26	646.26	646.26	646.26
5	671.95	644.84	649.3	650.83	659.34
10	672.27	658.92	632.98	662.52	665.84
15	661.2	644.28	644.03	674.86	707.92
20	628.98	619.09	662.31	725.22	757.99
25	605.94	610.62	678.56	777.02	839.35
30	600.94	587.2	697.19	822.1	898.01
35	566.56	571.59	693.32	869.44	949.8
40	521.67	554.79	690.7	878.14	1016.75
45	479.04	504.95	654.2	875.54	1032.15
50	421.54	447.94	608.99	850.28	1027.59
55	361.55	383.68	530.63	778.09	975.46
60	297.68	301.85	428.01	666.32	834.39
65	241.11	234.29	307.99	488.89	639.16
70	176.51	179.34	194.3	303.28	398.53
75	127.41	124.13	124.91	150.79	185.01
80	79.08	79.37	75.92	78.49	85.16
85	39.55	37.11	35.77	36.96	36.39
90	5.68	6.92	7.02	7.38	7.07
95	33.72	51.47	19.77	18.68	19.14
100	102.12	215.38	267.14	170.07	104.03
105	168.8	368.06	494.61	603.3	647.72
110	225.14	463.04	660.37	746.15	790.24
115	278.7	498.74	797.76	879.91	921.83
120	323.31	506.85	831.66	1010.83	1026.72
125	353.53	490.35	784.56	1004.18	1075.97
130	366.07	474.45	738.48	928.58	1001.76
135	379.74	446.03	680.65	855.13	910.68
140	367.27	423.62	618.71	765.06	821.68
145	369.56	410.83	536.22	673.91	721.03
150	372.72	403.81	470.8	569.54	610.75
155	360.14	386.47	414.5	469.9	508.68
160	359.85	377.84	397.01	401.71	421.26
165	345.64	353.63	393.2	401.95	381.41
170	342.95	331.85	347.39	368.23	384.66
175	326.94	325.6	314.74	321.86	329.62
180	320.93	320.93	320.93	320.93	320.93