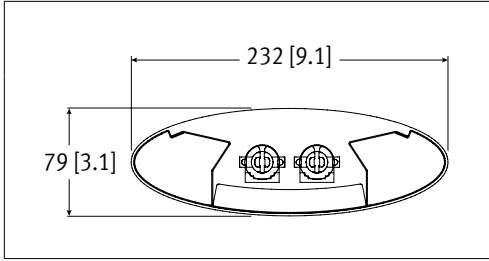


# Orbit II O2DS

## Fluorescent . Pendant



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

### ORDERING LOGIC

| Optics                     |                                       |        |  |    |                                     |        |         |  |          |                                |    |
|----------------------------|---------------------------------------|--------|--|----|-------------------------------------|--------|---------|--|----------|--------------------------------|----|
| O2DS                       | # of lamps                            | Source | Length   | Up | Down                                | Finish | Ballast | Circuitry                                    | Mounting | Voltage                        | IC |
| <b># of Lamps</b>          | <b>Length</b>                         |        | <b>Optics Up</b>                               |    | <b>Ballast</b>                      |        |         | <b>Mounting</b>                              |          | <b>Integrated Control (IC)</b> |    |
| 1 = 1 Lamp                 | 4 = 4 ft                              |        | P = Perforated                                 |    | E = Electronic Instant Start (T8)   |        |         | PA = Pendant Aircraft Cable                  |          | = None (leave space empty)     |    |
| 2 = 2 Lamps                | 8 = 8 ft                              |        | C = Clear Dust Cover                           |    | R = Programmed Rapid Start          |        |         | PT = Pendant Aircraft Cable for T-Bar        |          | D = Daylight Sensor            |    |
| 3 = 3 Lamps (T5/T5HO only) | R = Continuous Rows (Consult factory) |        | = Open Top (leave space empty)                 |    | D1 = 0-10V Dimming                  |        |         | SS = Solid Stem                              |          | O = Occupancy Sensor           |    |
| <b>Source</b>              |                                       |        | <b>Optics Down</b>                             |    | D2 = DALI                           |        |         | Select HANGER LENGTH and HANGER FINISH on p2 |          | DO = Daylight/Occupancy Sensor |    |
| T8                         |                                       |        | SB = Solid Cross Blade Baffle                  |    | <b>Circuitry</b>                    |        |         | <b>Voltage</b>                               |          |                                |    |
| T5                         |                                       |        | SBO = Solid Cross Blade Baffle w/ Opal Overlay |    | 1 = 1 Circuit                       |        |         | 1 = 120 V                                    |          |                                |    |
| T5HO                       |                                       |        | <b>Finish</b>                                  |    | LR = Left/Right Switching (2 Lamps) |        |         | 2 = 277 V                                    |          |                                |    |
|                            |                                       |        | W = White                                      |    | AS = Alternate Switching            |        |         | 3 = 347 V                                    |          |                                |    |
|                            |                                       |        | Custom Finish<br>C = Specify RAL#:             |    | IO = In/Out Switching (3 Lamps)     |        |         | 4 = UNV (120-277 V)                          |          |                                |    |
|                            |                                       |        |  |    | EM = Emergency/Night Light          |        |         |  |          |                                |    |
|                            |                                       |        |  |    | B = Battery                         |        |         |  |          |                                |    |

### 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.

**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.

**Ballast:** Instant Start (T8) , Programmed Rapid Start, 0-10V Dimming, DALI

**Approvals:** Certified to NRTL and IES testing standards. cULus certified.

**Environment:** Suitable for dry locations.

### WARRANTY

Metalumen will warrant a one year parts and labour warranty. Warranty is valid if luminaire is installed and used according to specification. The Ballast will carry a standard 5 year warranty by the manufacturer. If defective, Metalumen will send replacement ballasts or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to 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

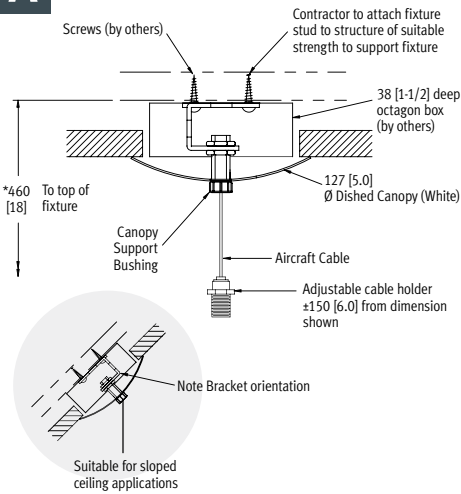
Metalumen's Start to End Development Process.

**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

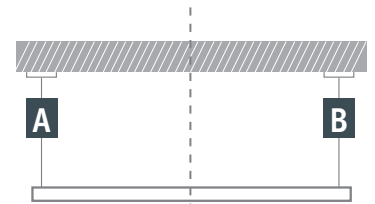
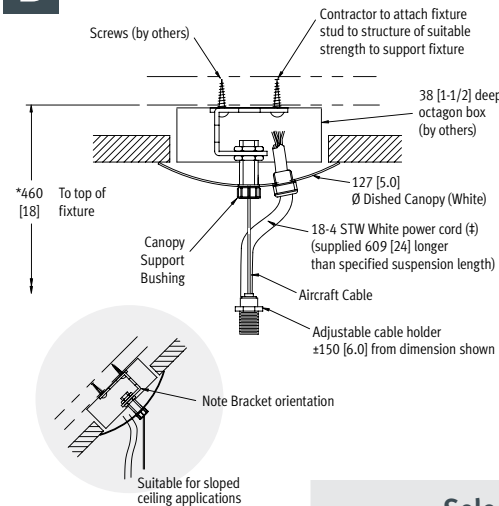
and exceptional design, Edulumen will earn high marks for meeting your requirements. Students challenge themselves throughout the day to achieve, and Metalumen is dedicated to this by creating sustainable environments that foster enhanced educational experiences.

HANGAR INFORMATION

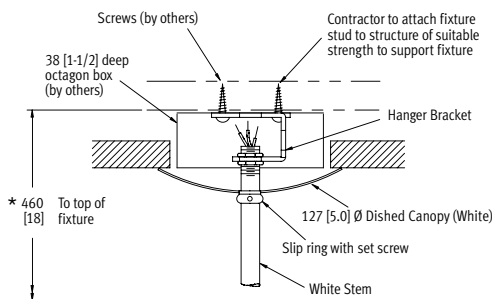
**A** Aircraft Cable



**B** Aircraft Cable & Cord



Solid Stem



Select Hanger Length below:

| SOLID STEM<br>1/2" OD STANDARD  |                |             |
|---|----------------|-------------|
| Standard supplied length is 18" (460mm).<br>Hangers will be supplied at closest length.<br>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.<br>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

- White Paint (Standard)
- Custom Specify RAL#:

PHOTOMETRIC DATA

2 T8 LAMPS

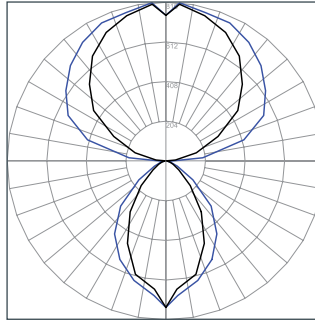
File Name: O2DS-2T8-4-SB-W-E1-PA-1  
 Luminaire Lumens: 4700  
 Total Watts: 78  
 Efficacy: 60 lms/W  
 Optics Up: Open top  
 Optics Down: Solid cross blade baffle

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method  
 Effective Floor Cavity Reflectance = .20

| RC  | 80 |    |    |    | 70 |    |    |    | 50 |    |    |    |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|
|     | RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 83 | 83 | 83 | 83 | 75 | 75 | 75 | 75 | 59 | 59 | 59 |    |
| 1   | 76 | 72 | 69 | 66 | 68 | 65 | 62 | 60 | 51 | 50 | 48 |    |
| 2   | 69 | 63 | 58 | 54 | 62 | 57 | 53 | 49 | 45 | 42 | 40 |    |
| 3   | 63 | 55 | 50 | 45 | 56 | 50 | 45 | 41 | 40 | 36 | 33 |    |
| 4   | 57 | 49 | 43 | 38 | 51 | 44 | 39 | 35 | 35 | 31 | 28 |    |
| 5   | 53 | 43 | 37 | 32 | 47 | 39 | 34 | 30 | 31 | 27 | 24 |    |
| 6   | 48 | 39 | 32 | 28 | 43 | 35 | 30 | 26 | 28 | 24 | 21 |    |
| 7   | 44 | 35 | 29 | 24 | 40 | 31 | 26 | 22 | 25 | 21 | 18 |    |
| 8   | 41 | 31 | 25 | 21 | 37 | 28 | 23 | 19 | 23 | 19 | 16 |    |
| 9   | 38 | 28 | 23 | 19 | 34 | 26 | 21 | 17 | 21 | 17 | 14 |    |
| 10  | 35 | 26 | 20 | 17 | 32 | 24 | 19 | 15 | 19 | 15 | 13 |    |

PHOTOMETRIC CURVE



CANDLE DISTRIBUTION

| Vertical Angle | Horizontal Angle |      |      |      |      |
|----------------|------------------|------|------|------|------|
|                | 0.0              | 22.5 | 45.0 | 67.5 | 90.0 |
| 0              | 753              | 753  | 753  | 753  | 753  |
| 5              | 661              | 685  | 696  | 723  | 735  |
| 15             | 603              | 617  | 636  | 702  | 732  |
| 25             | 468              | 495  | 560  | 660  | 713  |
| 35             | 320              | 360  | 459  | 593  | 693  |
| 45             | 179              | 216  | 330  | 449  | 550  |
| 55             | 81               | 94   | 170  | 305  | 408  |
| 65             | 41               | 46   | 65   | 141  | 195  |
| 75             | 20               | 22   | 27   | 39   | 74   |
| 85             | 8                | 7    | 9    | 12   | 22   |
| 90             | 4                | 17   | 39   | 53   | 57   |
| 95             | 50               | 137  | 191  | 219  | 221  |
| 105            | 163              | 281  | 416  | 476  | 490  |
| 115            | 296              | 392  | 555  | 663  | 681  |
| 125            | 453              | 510  | 628  | 724  | 761  |
| 135            | 557              | 607  | 693  | 751  | 784  |
| 145            | 659              | 692  | 745  | 783  | 798  |
| 155            | 728              | 743  | 782  | 796  | 811  |
| 165            | 774              | 796  | 790  | 800  | 803  |
| 175            | 808              | 805  | 816  | 794  | 812  |
| 180            | 749              | 749  | 749  | 749  | 749  |

LUMINANCE DATA (CD/M²)

| Vertical Angle | Horizontal Angle |     |      |
|----------------|------------------|-----|------|
|                | 0                | 45  | 90   |
| 45             | 585              | 927 | 1511 |
| 55             | 317              | 542 | 1263 |
| 65             | 208              | 249 | 717  |
| 75             | 150              | 134 | 348  |
| 85             | 123              | 66  | 150  |

2 T5HO LAMPS

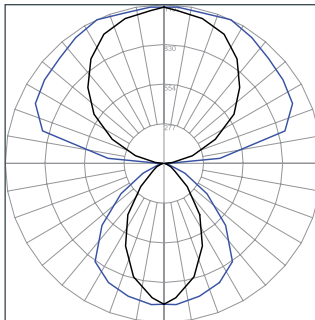
File Name: O2DS-2T5HO-4-SB-W-R1-PA-1  
 Total Lumens: 6579  
 Input Watts: 118  
 Efficacy: 56 lms/W  
 Optics Up: Open top  
 Optics Down: Solid cross blade baffle

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method  
 Effective Floor Cavity Reflectance = .20

| RC  | 80 |    |    |    | 70 |    |    |    | 50 |    |    |    |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|
|     | RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 76 | 76 | 76 | 76 | 68 | 68 | 68 | 68 | 53 | 53 | 53 |    |
| 1   | 70 | 67 | 64 | 61 | 62 | 60 | 57 | 55 | 47 | 45 | 44 |    |
| 2   | 63 | 58 | 54 | 50 | 57 | 52 | 49 | 46 | 41 | 39 | 36 |    |
| 3   | 58 | 51 | 46 | 42 | 52 | 46 | 42 | 38 | 36 | 33 | 31 |    |
| 4   | 53 | 45 | 40 | 35 | 47 | 41 | 36 | 32 | 32 | 29 | 26 |    |
| 5   | 48 | 40 | 34 | 30 | 43 | 36 | 31 | 27 | 29 | 25 | 22 |    |
| 6   | 44 | 36 | 30 | 26 | 40 | 32 | 27 | 24 | 26 | 22 | 19 |    |
| 7   | 41 | 32 | 26 | 22 | 37 | 29 | 24 | 21 | 23 | 20 | 17 |    |
| 8   | 38 | 29 | 23 | 20 | 34 | 26 | 21 | 18 | 21 | 17 | 15 |    |
| 9   | 35 | 26 | 21 | 17 | 31 | 24 | 19 | 16 | 19 | 16 | 13 |    |
| 10  | 33 | 24 | 19 | 15 | 29 | 22 | 17 | 14 | 17 | 14 | 12 |    |

PHOTOMETRIC CURVE



CANDLE DISTRIBUTION

| Vertical Angle | Horizontal Angle |      |      |      |      |
|----------------|------------------|------|------|------|------|
|                | 0.0              | 22.5 | 45.0 | 67.5 | 90.0 |
| 0              | 981              | 981  | 981  | 981  | 981  |
| 5              | 940              | 968  | 988  | 988  | 1055 |
| 15             | 819              | 856  | 882  | 959  | 998  |
| 25             | 635              | 671  | 767  | 918  | 1005 |
| 35             | 437              | 491  | 625  | 837  | 966  |
| 45             | 229              | 287  | 448  | 610  | 696  |
| 55             | 93               | 116  | 208  | 367  | 526  |
| 65             | 54               | 58   | 79   | 161  | 191  |
| 75             | 24               | 27   | 31   | 40   | 56   |
| 85             | 9                | 10   | 11   | 14   | 17   |
| 90             | 5                | 22   | 32   | 34   | 31   |
| 95             | 59               | 229  | 361  | 392  | 405  |
| 105            | 206              | 383  | 687  | 876  | 928  |
| 115            | 397              | 539  | 779  | 991  | 1044 |
| 125            | 597              | 702  | 858  | 1017 | 1070 |
| 135            | 749              | 834  | 952  | 1033 | 1073 |
| 145            | 890              | 944  | 1021 | 1072 | 1098 |
| 155            | 994              | 1013 | 1059 | 1107 | 1104 |
| 165            | 1045             | 1062 | 1086 | 1084 | 1094 |
| 175            | 1071             | 1062 | 1071 | 1095 | 1067 |
| 180            | 1091             | 1091 | 1091 | 1091 | 1091 |

LUMINANCE DATA (CD/M²)

| Vertical Angle | Horizontal Angle |      |      |
|----------------|------------------|------|------|
|                | 0                | 45   | 90   |
| 45             | 776              | 1307 | 1990 |
| 55             | 377              | 689  | 1696 |
| 65             | 283              | 314  | 731  |
| 75             | 186              | 160  | 274  |
| 85             | 141              | 84   | 121  |