

#### FEATURES

The ODVH-LED blends the traditional look of an architectural volumetric troffer with a center acrylic diffuser, resulting in unmatched optical performance that delivers the latest in LED technology and lens innovation. The integrated LEDs are strategically angled behind the center indirect acrylic diffuser to maximize lumen output and provide even illumination across the full face of the luminaire. The consistency of the volumetric effect results in optimized visual comfort, enhancing the quality of illumination. The combination of energy savings and optical performance creates the ideal choice for educational, medical, office and retail spaces.

| NOMINAL LUMENS | DELIVERED LUMENS | WATTAGE |
|----------------|------------------|---------|
| 6000           | 5898             | 46 W    |
| 5000           | 5110             | 40 W    |
| 4000           | 3829             | 30 W    |
| 3400           | 3115             | 24 W    |

Based on 4000K, 90+ CRI. Actual wattage may vary +/- 5%

|                         |                                                                                                                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LUMENS                  | 3400, 4000, 5000, 6000                                                                                                                                                   |
| CCT & DYNAMIC PLATFORMS | 30K, 35K, 40K, 50K, Tunable White, Dims to Warm, RGB + White                                                                                                             |
| CRI                     | 85+ (standard), 90+                                                                                                                                                      |
| COLOR QUALITY           | 3 Step MacAdam Ellipse                                                                                                                                                   |
| SIZE                    | 2'x2', 2'x4', 1'x4'                                                                                                                                                      |
| MOUNTING                | Recessed                                                                                                                                                                 |
| DIMMING & CONTROL       | 0-10V Flicker Free 1% Dimming Standard (DIM10), LUTH, LUTFTB, LUT2W, DIMST, ELDO10.1, ELDODMX.1, DALI.1                                                                  |
| EMERGENCY               | 10W - Up to 1000L output<br>20W - Up to 2000L output<br>EMG-LED-G2-10W-SDT - Self Diagnostic (Consult Factory)<br>EMG-LED-G2-20W-SDT - Self Diagnostic (Consult Factory) |
| LIFETIME                | L70 at 50,000 Hours                                                                                                                                                      |
| PHOTOMETRIC TESTS       | In Accordance with IES LM79-08, LM80 and TM-30, TM-21                                                                                                                    |



### MAINTENANCE

The center acrylic diffuser can be removed, allowing easy access to LED boards and driver compartment, locking into place for secure closure of the luminaire. LED engines and drivers are removable and upgradable even after luminaire installation. Luminaire can be regularly and safely wiped down to ensure optimal performance.

### OPTICAL SYSTEM

The LED light engine is secured to the body of the luminaire, with the body acting as a heat sink. A proprietary design of the lens results in zero pixilation, regardless of the viewing angle, with LEDs placed to promote a uniform appearance. The result is even illumination across the space, from luminaire to luminaire.

### CONSTRUCTION

Body is constructed of heavy-duty 20-gauge cold rolled steel, post-painted and engineered for maximum strength and extended life. All corners interlock to prevent aesthetic damage to the luminaire, with sides and corners uniformly turned in and hemmed to remove sharp edges for safe handling and easy installation. Luminaire is supplied with multiple wiring entrances for easy daisy chain of luminaires, to add power packs, whips, or other accessories in the field, or for continuous row mounting.

### FINISH

Post-painted with a 93% reflective white coat to improve luminaire efficacy, with all body components seamlessly interlocked for added structural strength.

### MOUNTING

Luminaires accommodate lay-in ceilings, Slot T, and T-bar suspension systems for 5/8" and 3/8" ceiling thicknesses. Four corner tie points are standard for safety wire support when required, with built-in earthquake clips, standard. Luminaires may be available with flange kits, surface mounted kits, and other options.

### OPTIONS

Luminaires can be shipped pre-installed with whips, modular wiring systems, daylight harvesting controls, occupancy sensors, and/or power packs for individual or room control applications.

### DRIVER ELECTRICAL INFORMATION

Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120/277V input. Available in 347V., produce less than 20% THD, and have a power factor of .90 to 1.00.

### DIMMING & DRIVER INFORMATION

**DIM10** - Flicker Free 1% Dimming Standard (DIM10) 0-10V dimming on either MVOLT 120, 277 or 347V.

**LUT2W** - Lutron LTEA2W Hi-Lume 1%. 2-wire LED driver (120V forward phase only).

**LUTH** - Lutron LDE1 Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology.

**ELDO10.1** - EldoLED SoloDrive 0-10V. Dimming down to 0.1%.

**DALI** - DALI DT6, DT8 dimming down to 1%.

**ELDODMX** - EldoLED PowerDrive dimming down to 0.1%.

Please see EldoLED website for wiring diagrams and a list of compatible DMX and DALI control systems.

**DIMST** - Step Dimming

### WARRANTY

Five-year warranty for parts and components. (Labor not included)

### LED DYNAMIC PLATFORM OPTIONS



Tunable White with Smart White Technology utilizing the Lumenetix Platform allows you to color tune the luminaire via various controls. Create the perfect environment for the desired use of the space, while maintaining a CRI of 90+ across the tunable range of 8000 to 1650K. (Click here for more details)



Dims to Warm with Smart Dimming Technology. At 100% full brightness the luminaire is at 3000K. When dimmed to 1%, the light transitions to 1800K, creating a warm ambiance within the space. (Click here for more details)



RGB+White with Smart Hue Technology provides full color mixing of RGB and white colors. Utilizing the Lumenetix Platform allows you to choose from unlimited RGB color options, via various controls. Ideal for Circadian Rhythm applications or to create the perfect human centric environment. (Click here for more details)

### LISTINGS

c-UL-us - Listed for Feed Through Wiring.

Listed for DLC, California Title 24 compliant.

Example: **14-ODVH-LED-4000L-DIM10-MVOLT-30K-85**

| 14           | ODVH                          | LED  |                                                                                          |                                                                                                                                                                           |                             |                          |          |                                                                                |                                                                                                                                                                                                                                                                                                                                        |  |
|--------------|-------------------------------|------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------|----------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| FIXTURE SIZE | SERIES                        | TYPE | LUMENS                                                                                   | DIMMING                                                                                                                                                                   | VOLTAGE                     | CCT                      | CRI      | EMERGENCY                                                                      | OTHER OPTIONS                                                                                                                                                                                                                                                                                                                          |  |
| 14 - 1' X 4' | ODVH - LED Volumetric Troffer | LED  | 3400L - 3400 lumens<br>4000L - 4000 lumens<br>5000L - 5000 lumens<br>6000L - 6000 lumens | DIM10 - 0-10V Dimming<br>DIMST - Step Dimming<br>LUTH - Lutron HiLume<br>LUT2W - Lutron 2Wire<br>ELDO10.1 - EldoLED 0-10V<br>DALI - EldoLED DALI<br>ELDODMX - EldoLED DMX | MVOLT<br>347*<br>120<br>277 | 30K<br>35K<br>40K<br>50K | 85<br>90 | O-EMG-LED-10W<br>O-EMG-LED-20W<br>O-EMG-LED-G2-10W-SDT<br>O-EMG-LED-G2-20W-SDT | 14FK - 1'x4' Flange Kit<br>SFB - Internal Fast Blow Fuse<br>RIS - Radio Interference Suppressor<br>USA - Made in America Compliance<br>FS-PPV2 - Fixture Sensor Power Pack<br>FD-301 - Low Voltage Daylight Dimming Photosensor<br>LMFC-011 - Digital Lighting Manager<br>FS-205 - Low Voltage Pir Fixture Integrated Occupancy Sensor |  |

\*Consult factory for details

\*Consult factory for details

LUT2W are available in 120V only LUT2W up to 5000L

LUTH, ELDO10.1, ELDO10.1, and ELDO10.1 are available in 120V and 277V

Reference last page for Control Options

\*FD-301 & FS-205 require FS-PPV2- Power Pack

#### 14-ODVH-LED-3400L-DIM10-MVOLT-40K-85

INPUT WATTS: **28.1**

LUMENS: **3318**

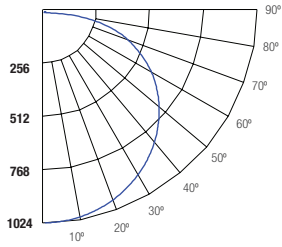
CRI: **85**

EFFICACY: **118**

CCT: **4000K**

TEST NO.: **EL121818**

##### Candle Power Distribution (Candelas)



##### Zonal Lumens Summary

| Zone   | Lumens  | %Lamp | %Fixt  |
|--------|---------|-------|--------|
| 0-30°  | 800.24  | N.A.  | 24.10  |
| 0-40°  | 1321.51 | N.A.  | 39.80  |
| 0-60°  | 2412.79 | N.A.  | 72.70  |
| 0-90°  | 3293.44 | N.A.  | 99.20  |
| 0-180° | 3318.46 | N.A.  | 100.00 |

##### Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0° | Average 45° | Average 90° |
|------------------|------------|-------------|-------------|
| 45°              | 2528       | 2755        | 2979        |
| 55°              | 2395       | 2798        | 3152        |
| 65°              | 2260       | 2917        | 3418        |
| 75°              | 1997       | 3172        | 3903        |
| 85°              | 1457       | 3656        | 4338        |

##### Candela Tabulation

|    | 0        | 45       | 90       |
|----|----------|----------|----------|
| 0  | 1022.823 | 1022.823 | 1022.823 |
| 5  | 1018.157 | 1018.985 | 1019.608 |
| 15 | 977.694  | 986.624  | 992.948  |
| 25 | 901.983  | 924.928  | 943.722  |
| 35 | 792.110  | 835.696  | 873.582  |
| 45 | 664.787  | 724.546  | 783.393  |
| 55 | 511.032  | 596.995  | 672.463  |
| 65 | 355.323  | 458.478  | 537.290  |
| 75 | 192.295  | 305.322  | 375.721  |
| 85 | 47.242   | 118.537  | 140.646  |
| 90 | 5.046    | 5.191    | 13.893   |

##### Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

| RC RW | 80% |     |     |     | 70% |     |     |     | 50% |     |     |     | 30% |     |     |     | 10% |     |     |     | 0% |    |    |    |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
|       | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0% | 0% | 0% | 0% |
| 0     | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99  | 99  | 99  | 99 | 99 | 99 | 99 |
| 1     | 107 | 102 | 97  | 93  | 104 | 100 | 95  | 91  | 95  | 91  | 88  | 91  | 88  | 85  | 87  | 85  | 83  | 80  | 80  | 80  | 80 | 80 | 80 | 80 |
| 2     | 97  | 88  | 80  | 74  | 94  | 86  | 79  | 73  | 82  | 76  | 71  | 79  | 74  | 70  | 75  | 71  | 68  | 66  | 66  | 66  | 66 | 66 | 66 | 66 |
| 3     | 88  | 77  | 68  | 61  | 85  | 75  | 67  | 60  | 72  | 65  | 59  | 69  | 63  | 58  | 66  | 61  | 57  | 54  | 54  | 54  | 54 | 54 | 54 | 54 |
| 4     | 80  | 67  | 58  | 51  | 78  | 66  | 57  | 51  | 63  | 56  | 50  | 61  | 54  | 49  | 59  | 53  | 48  | 46  | 46  | 46  | 46 | 46 | 46 | 46 |
| 5     | 73  | 60  | 51  | 44  | 71  | 59  | 50  | 43  | 57  | 49  | 43  | 54  | 48  | 42  | 52  | 46  | 42  | 39  | 39  | 39  | 39 | 39 | 39 | 39 |
| 6     | 68  | 54  | 44  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 37  | 49  | 42  | 37  | 47  | 41  | 36  | 34  | 34  | 34  | 34 | 34 | 34 | 34 |
| 7     | 63  | 49  | 40  | 33  | 61  | 48  | 39  | 33  | 46  | 38  | 33  | 45  | 38  | 32  | 43  | 37  | 32  | 30  | 30  | 30  | 30 | 30 | 30 | 30 |
| 8     | 58  | 44  | 36  | 30  | 57  | 44  | 35  | 29  | 42  | 35  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 27  | 27  | 27  | 27 | 27 | 27 | 27 |
| 9     | 54  | 41  | 32  | 26  | 53  | 40  | 32  | 26  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 24  | 24  | 24  | 24 | 24 | 24 | 24 |
| 10    | 51  | 37  | 29  | 24  | 50  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 28  | 24  | 34  | 28  | 23  | 22  | 22  | 22  | 22 | 22 | 22 | 22 |

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

##### Spacing Criteria

|          |        |
|----------|--------|
| 0-180    | : 1.24 |
| 90-270   | : 1.34 |
| Diagonal | : 1.42 |

EFFICACY: **118 LM/W**

#### 14-ODVH-LED-4000L-DIM10-MVOLT-40K-85

INPUT WATTS: **40.1**

LUMENS: **4759**

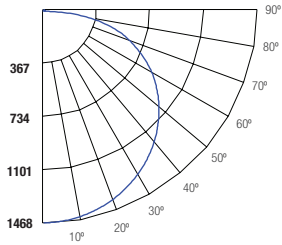
CRI: **85**

EFFICACY: **119**

CCT: **4000K**

TEST NO.: **EL121818**

##### Candle Power Distribution (Candelas)



##### Zonal Lumens Summary

| Zone   | Lumens  | %Lamp | %Fixt  |
|--------|---------|-------|--------|
| 0-30°  | 1147.71 | N.A.  | 24.10  |
| 0-40°  | 1895.33 | N.A.  | 39.80  |
| 0-60°  | 3460.44 | N.A.  | 72.70  |
| 0-90°  | 4723.49 | N.A.  | 99.20  |
| 0-180° | 4759.37 | N.A.  | 100.00 |

##### Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0° | Average 45° | Average 90° |
|------------------|------------|-------------|-------------|
| 45°              | 3625       | 3951        | 4272        |
| 55°              | 3435       | 4013        | 4521        |
| 65°              | 3242       | 4183        | 4902        |
| 75°              | 2865       | 4549        | 5597        |
| 85°              | 2090       | 5244        | 6222        |

##### Candela Tabulation

|    | 0        | 45       | 90       |
|----|----------|----------|----------|
| 0  | 1466.944 | 1466.944 | 1466.944 |
| 5  | 1460.251 | 1461.439 | 1462.333 |
| 15 | 1402.220 | 1415.027 | 1424.096 |
| 25 | 1293.634 | 1326.541 | 1353.497 |
| 35 | 1136.053 | 1198.564 | 1252.901 |
| 45 | 953.445  | 1039.152 | 1123.550 |
| 55 | 732.927  | 856.217  | 964.454  |
| 65 | 509.608  | 657.553  | 770.586  |
| 75 | 275.792  | 437.897  | 538.863  |
| 85 | 67.754   | 170.007  | 201.715  |
| 90 | 7.238    | 7.445    | 19.925   |

##### Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

| RC RW | 80% |     |     |     | 70% |     |     |     | 50% |     |     |     | 30% |     |     |     | 10% |     |     |     | 0% |    |    |    |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
|       | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0% | 0% | 0% | 0% |
| 0     | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99  | 99  | 99  | 99 | 99 | 99 | 99 |
| 1     | 107 | 102 | 97  | 93  | 104 | 100 | 95  | 91  | 95  | 91  | 88  | 91  | 88  | 85  | 87  | 85  | 83  | 80  | 80  | 80  | 80 | 80 | 80 | 80 |
| 2     | 97  | 88  | 80  | 74  | 94  | 86  | 79  | 73  | 82  | 76  | 71  | 79  | 74  | 70  | 75  | 71  | 68  | 66  | 66  | 66  | 66 | 66 | 66 | 66 |
| 3     | 88  | 77  | 68  | 61  | 85  | 75  | 67  | 60  | 72  | 65  | 59  | 69  | 63  | 58  | 66  | 61  | 57  | 54  | 54  | 54  | 54 | 54 | 54 | 54 |
| 4     | 80  | 67  | 58  | 51  | 78  | 66  | 57  | 51  | 63  | 56  | 50  | 61  | 54  | 49  | 59  | 53  | 48  | 46  | 46  | 46  | 46 | 46 | 46 | 46 |
| 5     | 73  | 60  | 51  | 44  | 71  | 59  | 50  | 43  | 57  | 49  | 43  | 54  | 48  | 42  | 52  | 46  | 42  | 39  | 39  | 39  | 39 | 39 | 39 | 39 |
| 6     | 68  | 54  | 44  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 37  | 49  | 42  | 37  | 47  | 41  | 36  | 34  | 34  | 34  | 34 | 34 | 34 | 34 |
| 7     | 63  | 49  | 40  | 33  | 61  | 48  | 39  | 33  | 46  | 38  | 33  | 45  | 38  | 32  | 43  | 37  | 32  | 30  | 30  | 30  | 30 | 30 | 30 | 30 |
| 8     | 58  | 44  | 36  | 30  | 57  | 44  | 35  | 29  | 42  | 35  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 27  | 27  | 27  | 27 | 27 | 27 | 27 |
| 9     | 54  | 41  | 32  | 26  | 53  | 40  | 32  | 26  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 24  | 24  | 24  | 24 | 24 | 24 | 24 |
| 10    | 51  | 37  | 29  | 24  | 50  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 28  | 24  | 34  | 28  | 23  | 22  | 22  | 22  | 22 | 22 | 22 | 22 |

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

##### Spacing Criteria

|          |        |
|----------|--------|
| 0-180    | : 1.24 |
| 90-270   | : 1.34 |
| Diagonal | : 1.42 |

EFFICACY: **119 LM/W**

#### 14-ODVH-LED-5000L-DIM10-MVOLT-40K-85

INPUT WATTS: **47.2**

LUMENS: **5496**

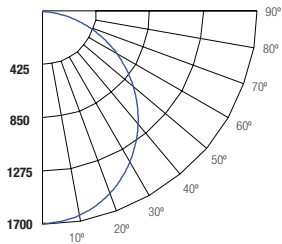
CRI: **85**

EFFICACY: **116**

CCT: **4000K**

TEST NO.: **EL121815**

##### Candle Power Distribution (Candelas)



##### Zonal Lumens Summary

| Zone   | Lumens  | %Lamp | %Fixt  |
|--------|---------|-------|--------|
| 0-30°  | 1327.56 | N.A.  | 24.20  |
| 0-40°  | 2192.19 | N.A.  | 39.90  |
| 0-60°  | 3996.05 | N.A.  | 72.70  |
| 0-90°  | 5454.2  | N.A.  | 99.20  |
| 0-180° | 5495.81 | N.A.  | 100.00 |

##### Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0° | Average 45° | Average 90° |
|------------------|------------|-------------|-------------|
| 45°              | 4941       | 4498        | 4098        |
| 55°              | 5229       | 4565        | 3889        |
| 65°              | 5668       | 4758        | 3593        |
| 75°              | 6465       | 5208        | 3080        |
| 85°              | 7170       | 6427        | 1815        |

##### Candela Tabulation

|    | 0        | 45       | 90       |
|----|----------|----------|----------|
| 0  | 1696.971 | 1696.971 | 1696.971 |
| 5  | 1691.847 | 1686.779 | 1685.657 |
| 15 | 1647.691 | 1628.008 | 1615.071 |
| 25 | 1565.775 | 1520.321 | 1483.045 |
| 35 | 1449.488 | 1368.170 | 1299.118 |
| 45 | 1299.685 | 1183.068 | 1077.854 |
| 55 | 1115.572 | 974.030  | 829.799  |
| 65 | 891.043  | 747.904  | 564.852  |
| 75 | 622.357  | 501.332  | 296.475  |
| 85 | 232.430  | 208.338  | 58.854   |
| 90 | 25.060   | 24.370   | 3.636    |

##### Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

| RC<br>RW                  | 80% |     |     |     | 70% |     |     |     | 50% |     |     |     | 30% |     |     |     | 10% |     |    |  | 0% |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|--|----|
|                           | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0%  |    |  |    |
| ROOM<br>CAPACITY<br>RATIO | 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99 |  |    |
|                           | 1   | 107 | 102 | 97  | 93  | 104 | 100 | 95  | 91  | 95  | 91  | 88  | 91  | 88  | 85  | 87  | 85  | 83  | 80 |  |    |
|                           | 2   | 93  | 88  | 83  | 79  | 93  | 88  | 83  | 79  | 73  | 74  | 71  | 73  | 74  | 73  | 74  | 73  | 70  | 68 |  |    |
|                           | 3   | 88  | 77  | 68  | 61  | 85  | 75  | 67  | 60  | 72  | 65  | 59  | 69  | 63  | 58  | 66  | 61  | 57  | 54 |  |    |
|                           | 4   | 80  | 67  | 58  | 51  | 78  | 66  | 57  | 51  | 63  | 56  | 50  | 61  | 54  | 49  | 59  | 53  | 48  | 46 |  |    |
|                           | 5   | 73  | 60  | 51  | 44  | 71  | 59  | 50  | 43  | 57  | 49  | 43  | 54  | 48  | 42  | 52  | 46  | 42  | 39 |  |    |
|                           | 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 37  | 49  | 42  | 37  | 47  | 41  | 36  | 34 |  |    |
|                           | 7   | 43  | 49  | 44  | 33  | 51  | 46  | 39  | 33  | 48  | 38  | 33  | 45  | 38  | 32  | 43  | 37  | 32  | 30 |  |    |
|                           | 8   | 55  | 44  | 36  | 30  | 57  | 44  | 36  | 30  | 42  | 35  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 26 |  |    |
|                           | 9   | 54  | 41  | 32  | 26  | 53  | 40  | 32  | 26  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 24 |  |    |
| 10                        | 51  | 37  | 29  | 24  | 50  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 28  | 24  | 34  | 28  | 23  | 22  |    |  |    |

#### 14-ODVH-LED-6000L-DIM10-MVOLT-40K-85

TEST NO.: **EL121813**

INPUT WATTS: **59.1**

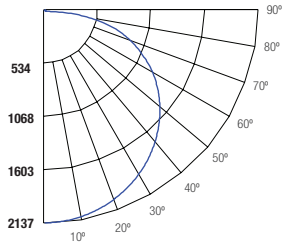
LUMENS: **6906**

CRI: **85**

EFFICACY: **117**

CCT: **4000K**

#### Candle Power Distribution (Candelas)



#### Zonal Lumens Summary

| Zone   | Lumens  | %Lamp | %Fixt  |
|--------|---------|-------|--------|
| 0-30°  | 1669.76 | N.A.  | 24.20  |
| 0-40°  | 2757.21 | N.A.  | 39.90  |
| 0-60°  | 5023.49 | N.A.  | 72.70  |
| 0-90°  | 6853.92 | N.A.  | 99.20  |
| 0-180° | 6906.39 | N.A.  | 100.00 |

#### Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0° | Average 45° | Average 90° |
|------------------|------------|-------------|-------------|
| 45°              | 6209       | 5659        | 5155        |
| 55°              | 6570       | 5738        | 4893        |
| 65°              | 7125       | 5981        | 4521        |
| 75°              | 8117       | 6548        | 3860        |
| 85°              | 9018       | 8105        | 2253        |

#### Candela Tabulation

|    | 0        | 45       | 90       |
|----|----------|----------|----------|
| 0  | 2134.604 | 2134.604 | 2134.604 |
| 5  | 2127.861 | 2121.535 | 2120.475 |
| 15 | 2071.799 | 2047.390 | 2032.011 |
| 25 | 1968.752 | 1911.145 | 1865.760 |
| 35 | 1822.560 | 1719.579 | 1634.251 |
| 45 | 1633.081 | 1488.302 | 1355.778 |
| 55 | 1401.771 | 1224.104 | 1043.887 |
| 65 | 1120.085 | 940.155  | 710.623  |
| 75 | 781.422  | 630.417  | 371.562  |
| 85 | 292.339  | 262.741  | 73.052   |
| 90 | 32.833   | 31.795   | 4.659    |

#### Spacing Criteria

|          |        |
|----------|--------|
| 0-180    | : 1.34 |
| 90-270   | : 1.24 |
| Diagonal | : 1.42 |

**EFFICACY: 117 LM/W**

#### Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

| RC | RW  | 80% |     |     |     | 70% |     |     |     | 50% |     |     |     | 30% |     |     |     | 10% |     |     |     | 0%  |     |     |    |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
|    |     | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0% |
| 0  | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99  |     |     |     |     |     |     |    |
| 1  | 107 | 102 | 97  | 93  | 104 | 100 | 95  | 91  | 95  | 92  | 88  | 91  | 88  | 85  | 87  | 85  | 83  | 80  |     |     |     |     |     |     |    |
| 2  | 97  | 88  | 80  | 74  | 94  | 86  | 79  | 73  | 82  | 76  | 71  | 79  | 74  | 70  | 75  | 71  | 68  | 66  |     |     |     |     |     |     |    |
| 3  | 88  | 77  | 68  | 61  | 85  | 75  | 67  | 60  | 72  | 65  | 59  | 69  | 63  | 58  | 66  | 61  | 57  | 54  |     |     |     |     |     |     |    |
| 4  | 80  | 67  | 58  | 51  | 78  | 66  | 57  | 51  | 63  | 56  | 50  | 61  | 54  | 49  | 59  | 53  | 48  | 46  |     |     |     |     |     |     |    |
| 5  | 74  | 60  | 51  | 44  | 71  | 59  | 50  | 43  | 57  | 49  | 43  | 54  | 48  | 42  | 52  | 46  | 42  | 39  |     |     |     |     |     |     |    |
| 6  | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 37  | 49  | 42  | 37  | 47  | 41  | 36  | 34  |     |     |     |     |     |     |    |
| 7  | 63  | 49  | 40  | 33  | 61  | 48  | 39  | 33  | 46  | 38  | 33  | 45  | 38  | 32  | 43  | 37  | 32  | 30  |     |     |     |     |     |     |    |
| 8  | 58  | 44  | 36  | 30  | 57  | 44  | 35  | 29  | 42  | 35  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 27  |     |     |     |     |     |     |    |
| 9  | 54  | 41  | 32  | 27  | 53  | 40  | 32  | 26  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 24  |     |     |     |     |     |     |    |
| 10 | 51  | 37  | 29  | 24  | 50  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 28  | 24  | 34  | 28  | 23  | 22  |     |     |     |     |     |     |    |

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

1- Luminaire will be shipped with Powerpacks pre-installed, ready to be integrated to designated control systems

2- Luminaire will be shipped with Sensors installed on the luminaire, allowing for individual luminaire control. Luminaires will be ready to be integrated with designated control systems

3- Luminaire will be shipped with Sensors to be remotely installed on the ceiling. Luminaires will be ready to be integrated with designated control systems

| BRAND                                          | EASYFIT<br>by EnOcean                                                | LUTRON                                                                                                                                                                                        | enlighted                                                                                                                                                                                                                                  | LEVITON®                                                                                                                                                                                                                       | OSRAM                                                                                                                                                                                                                                | PHILIPS<br>EasySense                                                                          | legrand®                                                                                                         |
|------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| CONTROL UNIT                                   | ❑ LEDRU<br>LED Relay Zone<br>Controller 0-10V <sup>1</sup>           | ❑ FCJS-0-10<br>Lutron Vive 0-10V Individual<br>Control Models <sup>14</sup>                                                                                                                   | ❑ CU-4E-FMH<br>Fixture Mount Control<br>Unit <sup>15</sup>                                                                                                                                                                                 | ❑ ZL027 -NOW<br>Intellect Power Control<br>Module <sup>16</sup>                                                                                                                                                                | ❑ EN-WCM2-ZB-DR<br>Wireless Control<br>Module <sup>17</sup>                                                                                                                                                                          | ❑ XITANIUM<br>SR LED DRIVER<br>The Philips<br>Advance Xitanium<br>SR LED driver <sup>18</sup> | ❑ LMFC-011<br>ON/OFF/0-10V<br>dimming fixture<br>controller <sup>19</sup>                                        |
|                                                | ❑ LEDDU<br>LED Zone Controller<br>0-10V <sup>1</sup>                 | ❑ FCJS-ECO<br>Lutron Vive Eco-system<br>Individual Control Models <sup>14</sup>                                                                                                               |                                                                                                                                                                                                                                            | ❑ ZL027 -DLE<br>Intellect Power Control<br>Module <sup>16</sup>                                                                                                                                                                | ❑ EN- ALC-ZB-BK-DR<br>Wireless Area Lighting<br>Control Module <sup>17</sup>                                                                                                                                                         |                                                                                               | ❑ FS-PP-V2<br>FS-PP Fixture<br>Integrated Sensor<br>Power Pack <sup>19</sup>                                     |
| INTEGRAT<br>OCCUPANCY&<br>DAYLIGHT<br>SENSOR   | N/A                                                                  | ❑ DFCSJ-OEM-OCC<br>Clear Connect (RF) and<br>Occupancy/<br>Daylight Sensing <sup>2</sup>                                                                                                      | ❑ SU-5E-IoT<br>IoT Node Micro Sensor<br>❑ SU-5E-CL<br>Connected Micro Sensor<br>❑ SU-5E-IL<br>Independent Micro Sensor<br>❑ SU-5S-H(IoT/CL/IL)<br>Surface Mount Sensor<br>(Must be Specified with CU-<br>4E-FMH Control Unit) <sup>2</sup> | ❑ ZL00J -TOW<br>Intellect Intelligent<br>Fixture Control<br>System <sup>2</sup>                                                                                                                                                | ❑ EN-CLM-PIR-DD-ZB<br>SensiLUM™ Wireless<br>Integrated Sensor                                                                                                                                                                        | ❑ SNS200<br>SNS200 for<br>grouping <sup>2</sup>                                               | ❑ FD-301<br>Fixture integrated<br>Daylight Dimming<br>Sensor <sup>2</sup>                                        |
|                                                |                                                                      |                                                                                                                                                                                               |                                                                                                                                                                                                                                            | ❑ ZL00J-DOW<br>Intellect Intelligent<br>Fixture Control<br>System <sup>2</sup>                                                                                                                                                 | ❑ ZBHA-<br>CLM-DIM-ENC<br>Connected Lighting<br>Module DIM <sup>2</sup>                                                                                                                                                              | ❑ SNS300<br>SNS300 for<br>networks <sup>2</sup>                                               | ❑ FS-205<br>Fixture integrated<br>passive infrared<br>occupancy sensor <sup>2</sup>                              |
| *WIRELESS<br>OCCUPANCY<br>SENSOR               | ❑ E0SCU-W-E0<br>Occupancy Sensor<br>- Ceiling Mounted <sup>3</sup>   | ❑ LRF2-OCR2B-P-WH<br>Ceiling mount 360°<br>,occupancy/vacancy sensor <sup>3</sup>                                                                                                             | N/A                                                                                                                                                                                                                                        | N/A                                                                                                                                                                                                                            | ❑ EN-SCPPH-<br>1500-ZB<br>Wireless Passive<br>Infrared Occupancy<br>and Photo Sensors <sup>3</sup>                                                                                                                                   | N/A                                                                                           | ❑ LMDC-100<br>Dual technology<br>PIR Ceiling Mount<br>Occupancy Sensor <sup>3</sup>                              |
| *WIRELESS<br>DAYLIGHT<br>SENSOR                | ❑ ELLSU-W-E0<br>Light Level Sensor -<br>Ceiling Mounted <sup>3</sup> | ❑ LRF2-DCRB-WH<br>Ceiling-mount daylight<br>sensor <sup>3</sup>                                                                                                                               | N/A                                                                                                                                                                                                                                        | N/A                                                                                                                                                                                                                            | ❑ EN-SCPPH-<br>1500-ZB<br>Wireless Passive<br>Infrared Occupancy<br>and Photo Sensors <sup>3</sup>                                                                                                                                   | N/A                                                                                           | ❑ LMLS-400<br>Single zone switching<br>and dimming digital<br>photosensor <sup>3</sup>                           |
| *WIRELESS<br>OCCUPANCY<br>& DAYLIGHT<br>SENSOR | N/A                                                                  | N/A                                                                                                                                                                                           | ❑ SU-5E-IoT<br>IoT Node Micro Sensor<br>❑ SU-5E-CL<br>Connected Micro Sensor<br>❑ SU-5E-IL<br>Independent Micro Sensor<br>❑ SU-5S-H(IoT/CL/IL)<br>Surface Mount Sensor<br>(Must be specified with CU-<br>4E-FMH Control Unit) <sup>3</sup> | ❑ ZL00J -TOW<br>Intellect Intelligent<br>Fixture Control System<br><br>❑ ZL00J-DOW<br>Intellect Intelligent<br>Fixture Control System<br><br>(Must be specified with<br>ZL027-NOW and ZL00J-<br>DOW Control unit) <sup>3</sup> | ❑ EN-CLM-<br>PIR-DD-ZB<br>SensiLUM™ Wireless<br>Integrated Sensor<br><br>❑ ZBHA-<br>CLM-DIM-ENC<br>Connected Lighting<br>Module DIM<br>(Must be specified<br>with EN-WCM2-ZB-DR<br>or EN- ALC-ZB-BK-DR<br>Control Unit) <sup>3</sup> | ❑ SNS200-CMP<br>SNS-200 for<br>Grouping <sup>3</sup>                                          | N/A                                                                                                              |
| ACCESORIES                                     | N/A                                                                  | N/A                                                                                                                                                                                           | ❑ TMC-SU-5E<br>Tile Mount Carrier<br>❑ CBL-5E-CU4-30N<br>30 inch Sensor cable for<br>CU-4 and IoT Ready<br>❑ CBL-5E-CU4-7F<br>7 Foot sensor cable for<br>CU-4 and IoT Ready Driver                                                         | N/A                                                                                                                                                                                                                            | N/A                                                                                                                                                                                                                                  | N/A                                                                                           | N/A                                                                                                              |
| NOTES                                          | N/A                                                                  | 4- Luminaire will be compatible with LUTRON LRF2-OCR2B-PWH Ceiling mount 360deg occupancy/ vacancy sensor & LRF2-DCRB-WH ceiling mount daylight sensor. Sensors must be orderd through Lutron | 5- Luminaire will be compatible with ENLIGHTED SU-5E-IoT, SU-5E-CL, SU-5E-IL, SU-5SH, Sensors                                                                                                                                              | 6- Luminaire will be compatible with LEVITON I ntellect APP & Keypad room controller                                                                                                                                           | 7- Luminaire will be compatible with EN-SCPPH-1500-ZB Wireless passive infrared occupancy and photo sensor                                                                                                                           | 8- Luminaire will be compatible with philips field and wireless switch                        | 9- Luminaire will be compatible with DLM Room control system LMPB-100. . Sensors must be orderd through Legrand. |