# **BEVEL**

LED - Architectural Recessed Troffer



|   | Project: | Catalogue #: | Туре: |
|---|----------|--------------|-------|
| Ī | Notes:   |              |       |
| ( |          |              |       |

#### **Product Description**

The Bevel is a premium-grade, recessed, lay-in T-Bar troffer featuring two angled lenses with a flat center rail. Its modern styling provides depth and high visual comfort with increased glare control. For use with indoor applications where highefficiency, high performance and ease of installation are required.

#### **Applications**

Office Areas, Retail Stores, Classrooms, Hospitals, Nursing Homes, Hospitality

#### **Features**

- 1x4, 2x2, 2x4 and 20x60 configurations
- Standard low voltage 1% dimming (0-10V)
- For use in insulated ceilings

### **Featured Options**

- Intellect occupancy/daylight sensor
- Tunable white
- Circadian lighting
- Emergency lighting battery pack

#### **Optical System**

Two angled frosted diffusers.

#### Mounting

This luminaire has been specifically designed for T-Bar applications. Integral earthquake clips.

### Construction

Die-formed, cold rolled heavy-gauge steel housing assembly. Wiring access plates and knockouts are provided on back of housing.

## Finish

White, polyester powder painted housing.

#### **Electrical**

Long life LEDs coupled with high efficiency drivers provide quality illumination. Rated to deliver L80 performance > 60,000 hours. Standard low voltage dimming (0-10v) driver.

#### Warranty

5 year limited warranty. For complete warranty, click here:





#### **Approvals**

• ETL listed. Suitable for damp locations

All configurations may not be DLC qualified. Check www.designlights.org/QPL for qualified configurations.



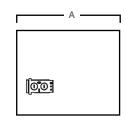






#### **Dimensions**

Top View



End View

| — В — |     |
|-------|-----|
|       |     |
|       | ر ا |

| Size  | Α      | В      | С  |
|-------|--------|--------|----|
| 1x4   | 47.75" | 11.75" | 4" |
| 2x2   | 23.75" | 23.75" | 4" |
| 2x4   | 47.75  | 23.75  | 4" |
| 20x60 | 59.75" | 19.75" | 4" |

Consult installation guide for exact dimensions.

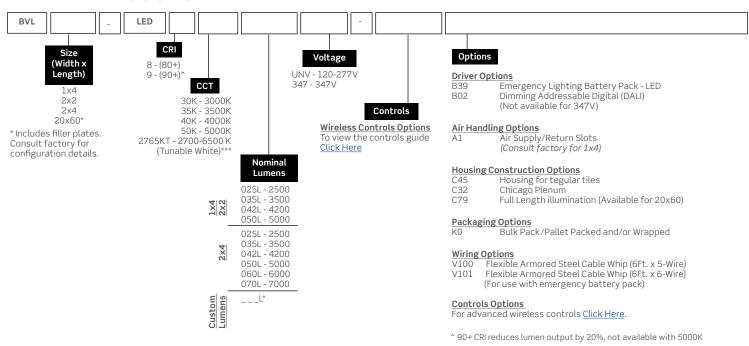
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### **Order Key**

#### **EXAMPLE: BVL2x2-LED840K042LUNV**



Performance Data

| LED Performance Data    |                   |                     |       |                    |
|-------------------------|-------------------|---------------------|-------|--------------------|
| Size                    | Nominal<br>Lumens | Delivered<br>Lumens | Watts | Lumens Per<br>Watt |
|                         | 2500              | 2533                | 19.3  | 131.4              |
| 1x4                     | 3500              | 3533                | 27.3  | 129.3              |
| 1X4                     | 4200              | 4269                | 33.5  | 127.6              |
|                         | 5000              | 4995                | 39.7  | 125.8              |
|                         | 2500              | 2523                | 18.8  | 134.2              |
| 2x2                     | 3500              | 3526                | 27.3  | 129.4              |
| 2x2                     | 4200              | 4251                | 33.7  | 126                |
|                         | 5000              | 5040                | 39    | 118                |
|                         | 2500              | 2518                | 17.3  | 145.6              |
|                         | 3500              | 3524                | 24.5  | 143.6              |
| 2x4                     | 4200              | 4242                | 29.9  | 142                |
| <b>△</b> ∧ <del>+</del> | 5000              | 5050                | 36.1  | 140.1              |
|                         | 6000              | 6043                | 43.9  | 137.7              |
|                         | 7000              | 7049                | 52.1  | 135.3              |

Values based on 840K with standard lens at 25C

| *Custom Lumens |                            |         |
|----------------|----------------------------|---------|
| Size           | Nominal<br>Lumens<br>Range | Watts   |
| 1x4            | 2500 - 5000                | 20 - 41 |
| 2x2            | 2500 - 5000                | 21 - 43 |
| 2x4 / 20x60    | 2500 - 7000                | 20 - 60 |

<sup>\*3000</sup>Lm Example: BVL2x2-LED840K0**30LC**UNV

| Flange Kits (Ordered Separately)  Size (Width x Length) Item No. |          |
|--|----------|
|  |          |
| 2x2  | KIT00137 |
| 2x4  | KIT00138 |
|  |          |

\*\*\* When Selecting 2765KT, if a tunable white-compatible control is not selected the luminaire will come standards with two sets of 0-10V wires for dimming and color tuning (see tunable white diagram for details). For

Other options may be available, consult factory. Specifications and data

compatible control options please consult factory.

subject to change without notice.

| Surface Kits (Ordered Separately) Size (Width x Length) Item No. |          |
|--|----------|
|  |          |
| 2x2  | KIT00374 |
| 2x4  | KIT00375 |

### **Performance Scaling Factor**

|       | 50K   | 40K   | 35K   | 30K   |
|-------|-------|-------|-------|-------|
| 80CRI | 1.000 | 1.000 | 0.960 | 0.946 |
| 90CRI | 0.875 | 0.875 | 0.836 | 0.809 |

### **Lifetime Expectancy**

|     | Calculated Hours | Reported Hours |
|-----|------------------|----------------|
| L70 | ≥ 238,000        | > 60,000       |
| L80 | ≥ 149,000        | > 60,000       |
| L90 | ≥ 71,000         | > 60,000       |

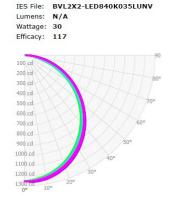
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### **Photometrics**



#### Zonal Lumen Summary

| Zone         | Lumens |        |
|--------------|--------|--------|
| 0.0° - 30.0° | 970    | 27.5%  |
| 0.0° - 40.0° | 1582   | 44.9%  |
| 0.0° - 60.0° | 2777   | 78.9%  |
| 0.0° - 90.0° | 3521   | 100.0% |

#### Average Luminance Table (cd/m2) CP Summary

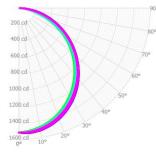
|        | 0.00° | 45.00° | 90.00 |
|--------|-------|--------|-------|
| 0.000  | 3481  | 3481   | 3481  |
| 45.00° | 3205  | 3111   | 3083  |
| 55.00° | 3068  | 2950   | 2915  |
| 65.00° | 2872  | 2708   | 2689  |
| 75.00° | 2462  | 2332   | 2347  |
| 85.00° | 991   | 1606   | 1582  |

#### Coefficients of Utilization

| рс |      | 80%  |      |      | 80%  |      |      | 70%  |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| ρw | 70%  | 50%  | 30%  | 10%  | 70%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 30%  |
| 0  | 4192 | 4192 | 4192 | 4192 | 4094 | 4094 | 4094 | 4094 | 3912 | 3912 | 3912 | 3746 | 3746 | 3746 | 3593 | 3593 | 3593 | 3521 |
| 1  | 3827 | 3658 | 3506 | 3369 | 3731 | 3577 | 3439 | 3314 | 3427 | 3313 | 3209 | 3290 | 3197 | 3110 | 3162 | 3088 | 3018 | 3022 |
| 2  | 3478 | 3186 | 2944 | 2742 | 3385 | 3119 | 2897 | 2709 | 2994 | 2806 | 2645 | 2878 | 2721 | 2584 | 2771 | 2641 | 2526 | 2583 |
| 3  | 3170 | 2797 | 2508 | 2278 | 3082 | 2741 | 2473 | 2257 | 2635 | 2405 | 2216 | 2538 | 2342 | 2177 | 2447 | 2282 | 2140 | 2231 |
| 4  | 2902 | 2477 | 2166 | 1929 | 2821 | 2430 | 2140 | 1915 | 2341 | 2089 | 1888 | 2259 | 2040 | 1862 | 2182 | 1993 | 1837 | 1949 |
| 5  | 2668 | 2213 | 1895 | 1660 | 2594 | 2174 | 1875 | 1651 | 2098 | 1835 | 1633 | 2028 | 1797 | 1615 | 1963 | 1760 | 1597 | 1722 |
| 6  | 2464 | 1993 | 1676 | 1449 | 2397 | 1959 | 1660 | 1443 | 1895 | 1628 | 1429 | 1836 | 1598 | 1417 | 1780 | 1569 | 1404 | 1536 |
| 7  | 2285 | 1807 | 1497 | 1280 | 2224 | 1778 | 1484 | 1275 | 1724 | 1459 | 1265 | 1673 | 1434 | 1256 | 1625 | 1410 | 1246 | 1382 |
| 8  | 2128 | 1649 | 1348 | 1141 | 2072 | 1625 | 1338 | 1138 | 1578 | 1317 | 1131 | 1534 | 1297 | 1124 | 1493 | 1278 | 1117 | 1253 |
| 9  | 1988 | 1514 | 1223 | 1027 | 1938 | 1493 | 1215 | 1024 | 1452 | 1198 | 1019 | 1414 | 1181 | 1013 | 1379 | 1165 | 1008 | 1143 |
| 10 | 1864 | 1397 | 1117 | 931  | 1819 | 1379 | 1110 | 929  | 1344 | 1096 | 925  | 1311 | 1082 | 921  | 1279 | 1069 | 916  | 1050 |

Effective Floor Cavity Reflectance: 20%

| IES File: | BVL2X4-LED840K042LUNV |
|-----------|-----------------------|
| Lumens:   | N/A                   |
| Wattage:  | 34                    |
| Efficacy: | 125                   |
|           |                       |



| Zonal Lu | ımen Sı | ımmary |
|----------|---------|--------|
|----------|---------|--------|

| Zone         | Lumens |         |
|--------------|--------|---------|
| 0.0° - 30.0° | 1171   | 27.5%   |
| 0.0° - 40.0° | 1910   | 44.9%   |
| 0.0° - 60.0° | 3354   | 78.9%   |
| 0.0° - 90.0° | 4252   | 100.0%  |
| 0.0 50.0     | .202   | 100.0.0 |

#### Average Luminance Table (cd/m2) CP Summary

|        | 0.00° | 45.00° | 90.00° |
|--------|-------|--------|--------|
| 0.00°  | 2086  | 2086   | 2086   |
| 45.00° | 1921  | 1864   | 1847   |
| 55.00° | 1839  | 1768   | 1747   |
| 65.00° | 1721  | 1623   | 1612   |
| 75.00° | 1475  | 1397   | 1407   |
| 85.00° | 594   | 962    | 948    |

#### Coefficients of Utilization

| ρc |      | 80%  |      | 1    | 80%  |      |      | 70%  |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| ρw | 70%  | 50%  | 30%  | 10%  | 70%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 30%  |
| 0  | 5062 | 5062 | 5062 | 5062 | 4944 | 4944 | 4944 | 4944 | 4725 | 4725 | 4725 | 4524 | 4524 | 4524 | 4339 | 4339 | 4339 | 4252 |
| 1  | 4622 | 4417 | 4234 | 4068 | 4505 | 4320 | 4153 | 4002 | 4139 | 4001 | 3875 | 3972 | 3860 | 3756 | 3819 | 3729 | 3644 | 3649 |
| 2  | 4200 | 3847 | 3556 | 3311 | 4088 | 3767 | 3498 | 3271 | 3615 | 3389 | 3194 | 3475 | 3286 | 3121 | 3346 | 3190 | 3051 | 3119 |
| 3  | 3828 | 3377 | 3028 | 2750 | 3722 | 3310 | 2986 | 2725 | 3182 | 2905 | 2676 | 3065 | 2828 | 2629 | 2955 | 2755 | 2584 | 2694 |
| 4  | 3504 | 2992 | 2616 | 2329 | 3406 | 2935 | 2584 | 2313 | 2828 | 2522 | 2280 | 2728 | 2463 | 2249 | 2635 | 2407 | 2218 | 2354 |
| 5  | 3222 | 2673 | 2289 | 2005 | 3132 | 2625 | 2264 | 1994 | 2534 | 2216 | 1972 | 2450 | 2170 | 1950 | 2371 | 2125 | 1928 | 2079 |
| 6  | 2976 | 2407 | 2024 | 1750 | 2894 | 2366 | 2005 | 1742 | 2289 | 1967 | 1726 | 2217 | 1930 | 1711 | 2150 | 1895 | 1695 | 1855 |
| 7  | 2760 | 2182 | 1808 | 1545 | 2686 | 2148 | 1792 | 1539 | 2082 | 1761 | 1528 | 2020 | 1732 | 1516 | 1962 | 1703 | 1505 | 1669 |
| 8  | 2569 | 1992 | 1628 | 1378 | 2502 | 1962 | 1615 | 1374 | 1906 | 1590 | 1365 | 1852 | 1566 | 1357 | 1803 | 1543 | 1348 | 1513 |
| 9  | 2401 | 1828 | 1477 | 1240 | 2340 | 1803 | 1467 | 1237 | 1754 | 1446 | 1230 | 1708 | 1426 | 1224 | 1665 | 1407 | 1217 | 1381 |
| 10 | 2251 | 1687 | 1349 | 1125 | 2196 | 1665 | 1341 | 1122 | 1623 | 1323 | 1117 | 1583 | 1307 | 1112 | 1545 | 1290 | 1107 | 1267 |

Effective Floor Cavity Reflectance: 20%

### **Tunable White**

When Selecting 2765KT, if a tunable white-compatible control is not selected the luminaire will come standard with two sets of 0-10V wires for dimming and color tuning. For compatible control options please consult factory.

Dim and CCT control wire colors are subject to change without notice. All control wires are marked per the parentheses.

