

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P829765

Luminaire Tested: **OHBL-12SE-MFL-UNV-L940-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P829765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-12SE-MFL-UNV-L940-CD
Description: 12000 LUMEN OHBL SE LED LUMINAIRE WITH 90CRI, 4000K LEDS AND MEDIUM FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

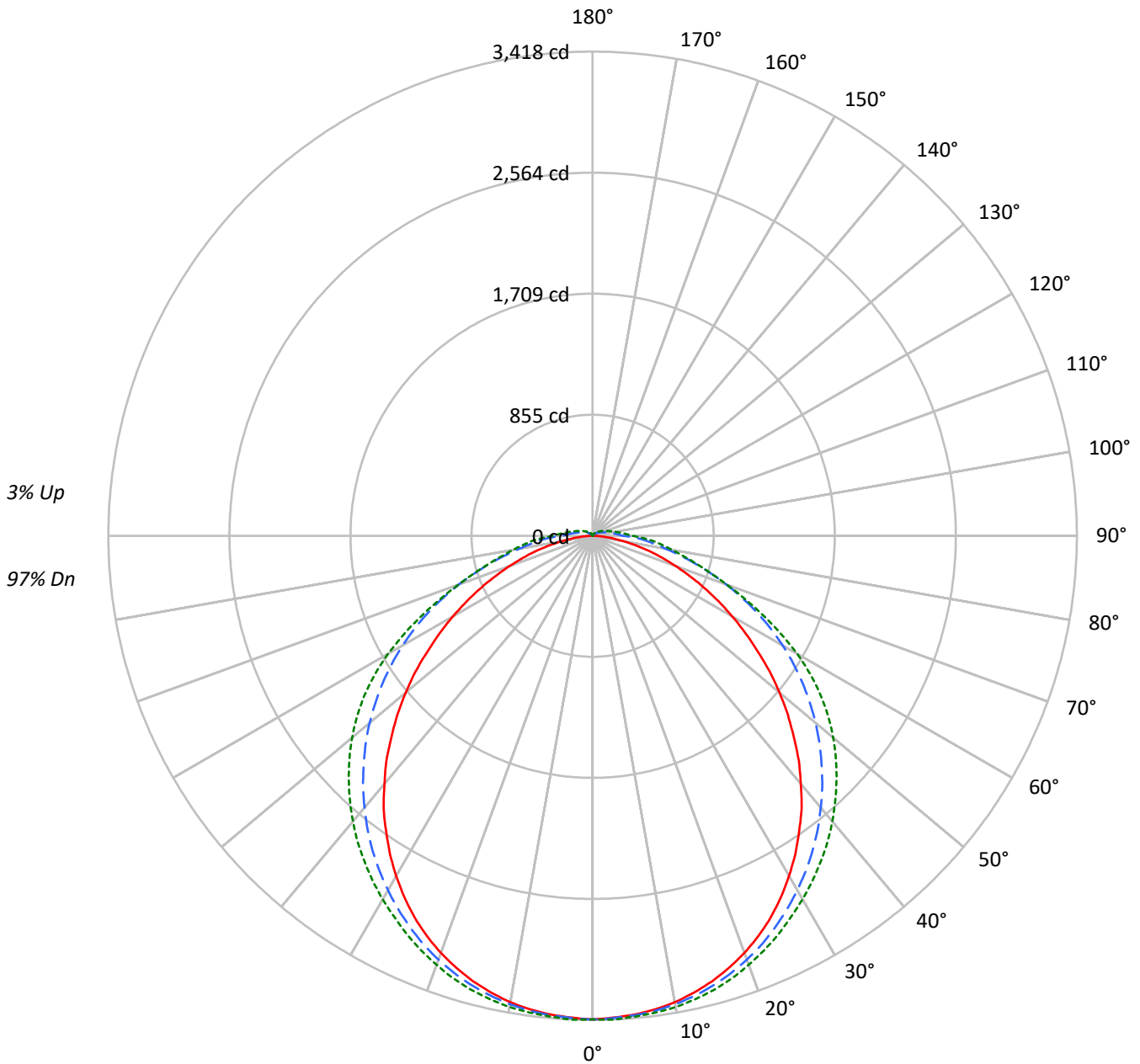
Lumens per Lamp: N/A
Luminaire Lumens: 10220.0 lumens
Efficiency: N/A
Efficacy: 146.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.88' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 70
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P829765

CATALOG NUMBER: OHBL-12SE-MFL-UNV-L940-CD

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | 0 | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 99 | 99 | 99 | 97 |
| 1 | 107 | 102 | 98 | 94 | 104 | 100 | 96 | 92 | 95 | 91 | 88 | 90 | 88 | 85 | 86 | 84 | 82 | 82 | 82 | 82 | 80 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 77 | 73 | 79 | 74 | 71 | 75 | 72 | 68 | 68 | 68 | 68 | 66 |
| 3 | 89 | 78 | 70 | 63 | 86 | 76 | 69 | 62 | 73 | 66 | 61 | 70 | 64 | 59 | 67 | 62 | 58 | 58 | 58 | 58 | 56 |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 57 | 52 | 62 | 56 | 51 | 59 | 54 | 50 | 50 | 50 | 50 | 47 |
| 5 | 75 | 62 | 53 | 46 | 72 | 60 | 52 | 46 | 58 | 50 | 45 | 56 | 49 | 44 | 53 | 48 | 43 | 43 | 43 | 43 | 41 |
| 6 | 69 | 56 | 47 | 40 | 67 | 54 | 46 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 48 | 43 | 38 | 38 | 38 | 38 | 36 |
| 7 | 64 | 50 | 42 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 39 | 34 | 44 | 38 | 34 | 34 | 34 | 34 | 32 |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 30 | 30 | 30 | 30 | 28 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 37 | 32 | 27 | 27 | 27 | 27 | 25 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 25 | 25 | 25 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11109 | 11109 | 11109 |
| 5° | 11038 | 10939 | 10945 |
| 10° | 10961 | 10778 | 10797 |
| 15° | 10838 | 10600 | 10632 |
| 20° | 10676 | 10396 | 10434 |
| 25° | 10459 | 10158 | 10233 |
| 30° | 10159 | 9905 | 10030 |
| 35° | 9795 | 9638 | 9837 |
| 40° | 9358 | 9337 | 9639 |
| 45° | 8842 | 9014 | 9408 |
| 50° | 8279 | 8681 | 9142 |
| 55° | 7586 | 8286 | 8768 |
| 60° | 6876 | 7827 | 8157 |
| 65° | 6101 | 7261 | 7253 |
| 70° | 5261 | 6558 | 6283 |
| 75° | 4411 | 5749 | 5526 |
| 80° | 3344 | 5051 | 5110 |
| 85° | 2115 | 4783 | 5047 |



TEST NUMBER: P829765

CATALOG NUMBER: OHBL-12SE-MFL-UNV-L940-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 323.6 | 3.2 |
| 10°-20° | 928.3 | 9.1 |
| 20°-30° | 1403.9 | 13.7 |
| 30°-40° | 1685.4 | 16.5 |
| 40°-50° | 1740.7 | 17.0 |
| 50°-60° | 1566.1 | 15.3 |
| 60°-70° | 1179.7 | 11.5 |
| 70°-80° | 712.4 | 7.0 |
| 80°-90° | 348.4 | 3.4 |
| 90°-100° | 146.6 | 1.4 |
| 100°-110° | 83.7 | 0.8 |
| 110°-120° | 49.1 | 0.5 |
| 120°-130° | 27.8 | 0.3 |
| 130°-140° | 14.6 | 0.1 |
| 140°-150° | 7.1 | 0.1 |
| 150°-160° | 2.6 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 2655.7 | 26.0 |
| 0°-40° | 4341.1 | 42.5 |
| 0°-60° | 7647.9 | 74.8 |
| 0°-90° | 9888.3 | 96.8 |
| 90°-120° | 279.5 | 2.7 |
| 90°-150° | 329.1 | 3.2 |
| 90°-180° | 332.0 | 3.2 |
| 0°-180° | 10220.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3415 | 3415 | 3415 | 3415 | 3415 | |
| 5° | 3393 | 3402 | 3398 | 3412 | 3407 | 322 |
| 15° | 3256 | 3272 | 3287 | 3314 | 3318 | 918 |
| 25° | 2974 | 3006 | 3049 | 3096 | 3104 | 1368 |
| 35° | 2542 | 2602 | 2709 | 2790 | 2807 | 1589 |
| 45° | 2007 | 2108 | 2284 | 2409 | 2434 | 1549 |
| 55° | 1422 | 1569 | 1807 | 1943 | 1966 | 1275 |
| 65° | 868 | 1045 | 1279 | 1342 | 1327 | 862 |
| 75° | 409 | 587 | 740 | 760 | 752 | 436 |
| 85° | 85 | 225 | 371 | 422 | 430 | 98 |
| 90° | 0 | 88 | 212 | 267 | 278 | 5 |
| 95° | 4 | 59 | 159 | 202 | 210 | 4 |
| 105° | 6 | 34 | 92 | 120 | 125 | 6 |
| 115° | 7 | 19 | 57 | 76 | 79 | 7 |
| 125° | 7 | 9 | 34 | 49 | 52 | 6 |
| 135° | 6 | 8 | 18 | 30 | 33 | 5 |
| 145° | 8 | 8 | 8 | 15 | 18 | 5 |
| 155° | 8 | 9 | 8 | 8 | 8 | 3 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P829765

CATALOG NUMBER: OHBL-12SE-MFL-UNV-L940-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3414.8 | 3414.8 | 3414.8 | 3414.8 | 3414.8 |
| 2.5° | 3404.8 | 3413.2 | 3408.1 | 3419.0 | 3418.2 |
| 5° | 3393.1 | 3402.3 | 3398.1 | 3411.5 | 3407.3 |
| 7.5° | 3373.0 | 3383.1 | 3382.2 | 3397.3 | 3395.6 |
| 10° | 3343.8 | 3354.7 | 3358.0 | 3378.1 | 3378.1 |
| 12.5° | 3303.7 | 3317.9 | 3326.2 | 3350.5 | 3351.3 |
| 15° | 3256.0 | 3271.9 | 3287.0 | 3314.5 | 3317.9 |
| 17.5° | 3198.4 | 3218.4 | 3239.3 | 3271.1 | 3275.3 |
| 20° | 3133.2 | 3155.7 | 3184.2 | 3217.6 | 3222.6 |
| 22.5° | 3058.0 | 3084.7 | 3121.5 | 3160.8 | 3166.6 |
| 25° | 2973.6 | 3006.2 | 3048.8 | 3096.4 | 3103.9 |
| 27.5° | 2877.4 | 2915.1 | 2972.7 | 3026.2 | 3032.9 |
| 30° | 2773.0 | 2817.3 | 2889.1 | 2952.7 | 2963.5 |
| 32.5° | 2662.7 | 2713.6 | 2802.2 | 2873.3 | 2888.3 |
| 35° | 2542.3 | 2601.7 | 2708.6 | 2790.5 | 2807.2 |
| 37.5° | 2423.6 | 2488.8 | 2610.0 | 2703.6 | 2723.7 |
| 40° | 2284.9 | 2366.0 | 2504.7 | 2608.3 | 2632.6 |
| 42.5° | 2154.5 | 2242.3 | 2399.4 | 2512.2 | 2535.6 |
| 45° | 2006.6 | 2107.7 | 2284.1 | 2408.6 | 2434.5 |
| 47.5° | 1867.9 | 1977.4 | 2172.9 | 2301.6 | 2328.4 |
| 50° | 1721.6 | 1842.0 | 2054.2 | 2188.8 | 2216.4 |
| 52.5° | 1575.4 | 1704.9 | 1931.4 | 2071.0 | 2096.9 |
| 55° | 1421.6 | 1568.7 | 1806.9 | 1943.1 | 1966.5 |
| 57.5° | 1278.7 | 1434.1 | 1679.0 | 1808.5 | 1822.7 |
| 60° | 1137.4 | 1298.7 | 1548.6 | 1662.3 | 1667.3 |
| 62.5° | 999.5 | 1169.2 | 1414.9 | 1505.2 | 1498.5 |
| 65° | 867.5 | 1044.7 | 1278.7 | 1342.2 | 1327.2 |
| 67.5° | 740.5 | 923.5 | 1139.1 | 1180.1 | 1160.0 |
| 70° | 620.1 | 805.7 | 1003.7 | 1024.6 | 1006.2 |
| 72.5° | 514.0 | 693.7 | 866.7 | 884.2 | 870.8 |
| 75° | 408.7 | 586.7 | 740.5 | 759.7 | 752.2 |
| 77.5° | 310.1 | 483.1 | 624.3 | 649.4 | 651.0 |
| 80° | 223.1 | 388.6 | 523.2 | 562.5 | 567.5 |
| 82.5° | 147.1 | 301.7 | 438.8 | 488.9 | 496.4 |
| 85° | 85.2 | 224.8 | 371.1 | 422.0 | 429.6 |
| 87.5° | 36.8 | 162.1 | 298.4 | 344.3 | 353.5 |
| 90° | 0.0 | 87.8 | 212.3 | 267.4 | 278.3 |
| 92.5° | 2.5 | 72.7 | 182.2 | 232.3 | 241.5 |
| 95° | 4.2 | 59.3 | 158.8 | 202.2 | 209.8 |
| 97.5° | 5.0 | 50.1 | 137.9 | 176.3 | 183.9 |
| 100° | 5.0 | 43.5 | 119.5 | 154.6 | 161.3 |
| 102.5° | 5.0 | 38.4 | 104.5 | 135.4 | 141.2 |
| 105° | 5.9 | 34.3 | 91.9 | 120.3 | 125.4 |



TEST NUMBER: P829765

CATALOG NUMBER: OHBL-12SE-MFL-UNV-L940-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 6.7 | 22.6 | 63.5 | 85.2 | 88.6 |
| 115° | 6.7 | 19.2 | 56.8 | 76.1 | 79.4 |
| 117.5° | 7.5 | 16.7 | 50.1 | 68.5 | 71.0 |
| 120° | 7.5 | 14.2 | 44.3 | 61.0 | 64.4 |
| 122.5° | 7.5 | 11.7 | 39.3 | 55.2 | 57.7 |
| 125° | 6.7 | 9.2 | 34.3 | 49.3 | 51.8 |
| 127.5° | 5.9 | 7.5 | 29.3 | 44.3 | 46.8 |
| 130° | 5.9 | 6.7 | 25.1 | 39.3 | 41.8 |
| 132.5° | 5.9 | 7.5 | 20.9 | 34.3 | 37.6 |
| 135° | 5.9 | 7.5 | 17.6 | 30.1 | 33.4 |
| 137.5° | 5.9 | 7.5 | 14.2 | 25.9 | 29.3 |
| 140° | 6.7 | 7.5 | 11.7 | 21.7 | 25.1 |
| 142.5° | 7.5 | 7.5 | 9.2 | 18.4 | 20.9 |
| 145° | 8.4 | 7.5 | 8.4 | 15.0 | 17.6 |
| 147.5° | 8.4 | 8.4 | 8.4 | 11.7 | 14.2 |
| 150° | 8.4 | 9.2 | 8.4 | 9.2 | 11.7 |
| 152.5° | 8.4 | 9.2 | 8.4 | 7.5 | 9.2 |
| 155° | 8.4 | 9.2 | 8.4 | 7.5 | 8.4 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







| | | | | | |
|--------|-----|------|------|-------|-------|
| 107.5° | 5.9 | 30.1 | 81.1 | 107.0 | 111.2 |
| 110° | 5.9 | 26.7 | 71.9 | 95.3 | 99.5 |



(END OF REPORT)