

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: P830537

Luminaire Tested: **OHBL-48SE-MCL-UNV-L740-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-200-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-48SE-MCL-UNV-L740-CD
Description: 48000 LUMEN OHBL SE LED LUMINAIRE WITH 70CRI, 4000K LEDS AND MEDIUM CLEAR LENS
Light Source: -
Ballast/Driver: -

Summary

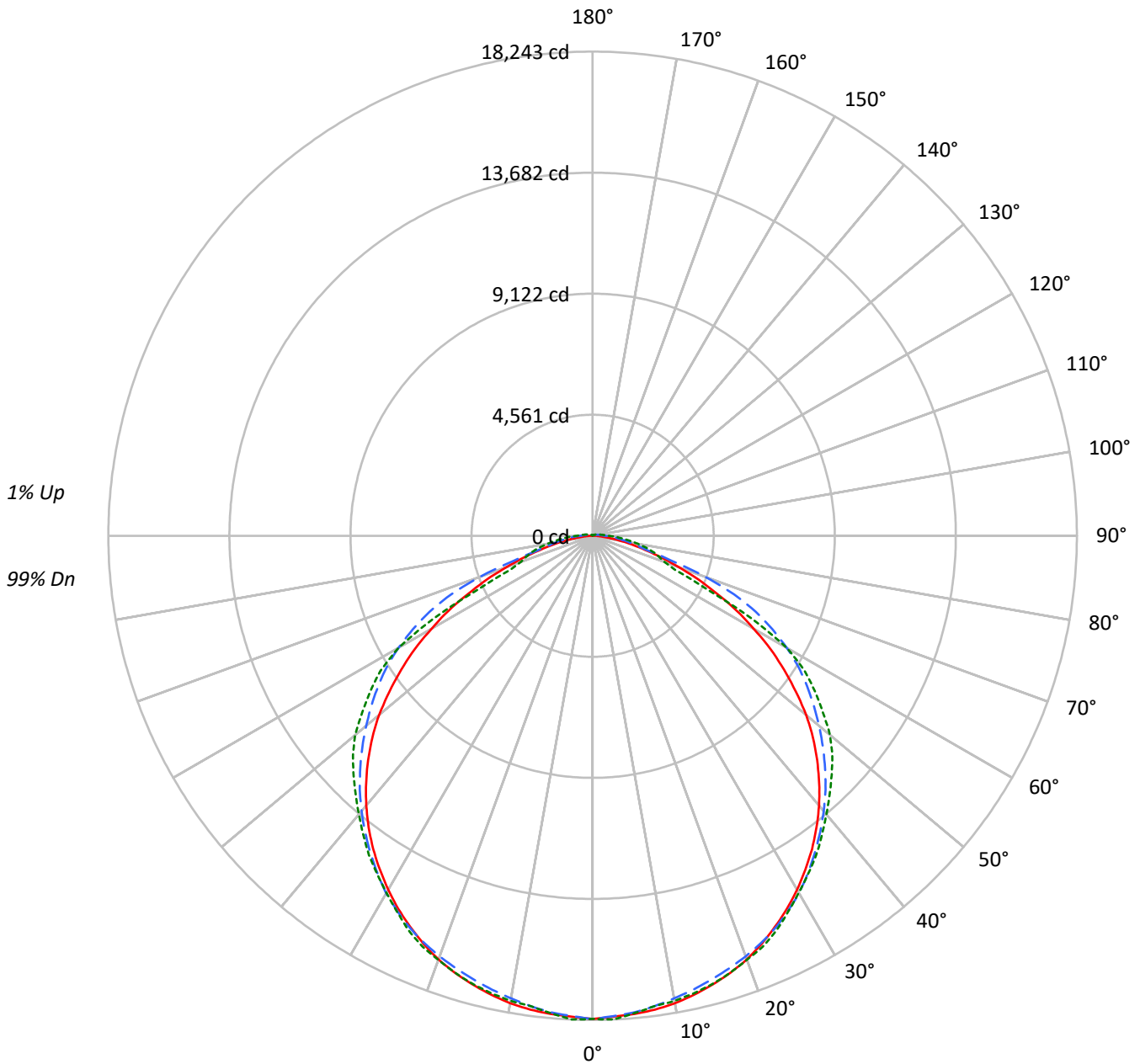
Lumens per Lamp: N/A
Luminaire Lumens: 51458.0 lumens
Efficiency: N/A
Efficacy: 178.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 288.8
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: P830537

CATALOG NUMBER: OHBL-48SE-MCL-UNV-L740-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830537

CATALOG NUMBER: OHBL-48SE-MCL-UNV-L740-CD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 106 | 106 | 106 | 101 | 101 | 101 | | | | 99 | | | | | | | | | | | | | | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 87 | 86 | | | | 83 | | | | | | | | | | | | | | | | |
| 2 | 99 | 91 | 84 | 79 | 96 | 89 | 83 | 78 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 75 | 72 | | | | 70 | | | | | | | | | | | | | | | | |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 75 | 69 | 64 | 72 | 67 | 63 | 70 | 65 | 61 | | | | 59 | | | | | | | | | | | | | | | | |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 62 | 57 | 53 | | | | 51 | | | | | | | | | | | | | | | | |
| 5 | 76 | 64 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | | | | 44 | | | | | | | | | | | | | | | | |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 52 | 46 | 41 | 51 | 45 | 40 | | | | 38 | | | | | | | | | | | | | | | | |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 36 | | | | 34 | | | | | | | | | | | | | | | | |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 42 | 36 | 32 | | | | 30 | | | | | | | | | | | | | | | | |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | | | | 27 | | | | | | | | | | | | | | | | |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | | | | 24 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 31095 | 31095 | 31095 |
| 5° | 30892 | 30630 | 30688 |
| 10° | 30779 | 30152 | 30328 |
| 15° | 30584 | 29792 | 30106 |
| 20° | 30388 | 29559 | 29819 |
| 25° | 30022 | 29325 | 29534 |
| 30° | 29623 | 28964 | 28954 |
| 35° | 29146 | 28398 | 28623 |
| 40° | 28526 | 27814 | 28179 |
| 45° | 27667 | 27139 | 27965 |
| 50° | 26503 | 26371 | 27712 |
| 55° | 24653 | 25613 | 26641 |
| 60° | 22231 | 24512 | 24588 |
| 65° | 19070 | 22491 | 15549 |
| 70° | 15361 | 17521 | 11240 |
| 75° | 11516 | 10370 | 11360 |
| 80° | 8017 | 8582 | 10771 |
| 85° | 4562 | 7793 | 9965 |



TEST NUMBER: P830537

CATALOG NUMBER: OHBL-48SE-MCL-UNV-L740-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1716.6 | 3.3 |
| 10°-20° | 4922.5 | 9.6 |
| 20°-30° | 7518.3 | 14.6 |
| 30°-40° | 9122.2 | 17.7 |
| 40°-50° | 9560.9 | 18.6 |
| 50°-60° | 8663.7 | 16.8 |
| 60°-70° | 5808.6 | 11.3 |
| 70°-80° | 2608.3 | 5.1 |
| 80°-90° | 946.5 | 1.8 |
| 90°-100° | 284.9 | 0.6 |
| 100°-110° | 134.4 | 0.3 |
| 110°-120° | 67.4 | 0.1 |
| 120°-130° | 37.2 | 0.1 |
| 130°-140° | 25.6 | 0.0 |
| 140°-150° | 17.2 | 0.0 |
| 150°-160° | 12.8 | 0.0 |
| 160°-170° | 8.2 | 0.0 |
| 170°-180° | 2.6 | 0.0 |
| 0°-30° | 14157.4 | 27.5 |
| 0°-40° | 23279.7 | 45.2 |
| 0°-60° | 41504.3 | 80.7 |
| 0°-90° | 50867.8 | 98.9 |
| 90°-120° | 486.7 | 0.9 |
| 90°-150° | 566.6 | 1.1 |
| 90°-180° | 590.0 | 1.1 |
| 0°-180° | 51458.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 18206 | 18206 | 18206 | 18206 | 18206 | |
| 5° | 18087 | 18151 | 18024 | 18080 | 18056 | ### |
| 15° | 17500 | 17432 | 17308 | 17461 | 17482 | 4941 |
| 25° | 16258 | 16187 | 16300 | 16450 | 16403 | 7494 |
| 35° | 14410 | 14444 | 14592 | 14747 | 14689 | 9007 |
| 45° | 11959 | 12154 | 12380 | 12696 | 12736 | 9213 |
| 55° | 8800 | 9224 | 9853 | 10248 | 10224 | 7855 |
| 65° | 5165 | 5973 | 6781 | 5723 | 4673 | 5146 |
| 75° | 2032 | 2948 | 2169 | 2219 | 2364 | 2221 |
| 85° | 350 | 671 | 861 | 1040 | 1090 | 427 |
| 90° | 3 | 224 | 445 | 558 | 584 | 21 |
| 95° | 3 | 140 | 305 | 371 | 382 | 4 |
| 105° | 10 | 60 | 150 | 182 | 190 | 12 |
| 115° | 21 | 32 | 76 | 97 | 103 | 20 |
| 125° | 18 | 21 | 47 | 55 | 58 | 18 |
| 135° | 24 | 26 | 29 | 42 | 45 | 19 |
| 145° | 24 | 26 | 26 | 29 | 32 | 16 |
| 155° | 26 | 29 | 29 | 29 | 26 | 12 |
| 165° | 29 | 29 | 29 | 29 | 29 | 8 |
| 175° | 29 | 29 | 26 | 24 | 24 | 3 |
| 180° | 26 | 26 | 26 | 26 | 26 | |



TEST NUMBER: P830537

CATALOG NUMBER: OHBL-48SE-MCL-UNV-L740-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 18205.9 | 18205.9 | 18205.9 | 18205.9 | 18205.9 |
| 2.5° | 18132.2 | 18208.5 | 18113.7 | 18216.4 | 18242.7 |
| 5° | 18087.4 | 18150.6 | 18024.2 | 18079.5 | 18055.8 |
| 7.5° | 18005.8 | 18026.9 | 17876.8 | 17921.6 | 17874.2 |
| 10° | 17884.7 | 17874.2 | 17697.8 | 17784.7 | 17795.2 |
| 12.5° | 17705.7 | 17674.1 | 17516.2 | 17647.8 | 17650.4 |
| 15° | 17500.4 | 17431.9 | 17308.2 | 17460.9 | 17482.0 |
| 17.5° | 17263.5 | 17174.0 | 17092.4 | 17289.8 | 17258.2 |
| 20° | 16987.1 | 16881.8 | 16866.0 | 17081.8 | 17002.9 |
| 22.5° | 16644.9 | 16563.2 | 16600.1 | 16805.4 | 16755.4 |
| 25° | 16257.9 | 16186.8 | 16300.0 | 16450.1 | 16402.7 |
| 27.5° | 15849.9 | 15807.7 | 15936.7 | 16052.6 | 15960.4 |
| 30° | 15402.3 | 15378.7 | 15549.8 | 15644.5 | 15528.7 |
| 32.5° | 14915.3 | 14923.2 | 15086.5 | 15215.4 | 15107.5 |
| 35° | 14409.9 | 14444.1 | 14591.6 | 14746.9 | 14689.0 |
| 37.5° | 13854.5 | 13930.8 | 14078.2 | 14254.6 | 14194.1 |
| 40° | 13267.4 | 13378.0 | 13541.2 | 13754.4 | 13699.2 |
| 42.5° | 12633.0 | 12772.5 | 12983.1 | 13220.1 | 13214.8 |
| 45° | 11959.1 | 12153.9 | 12380.3 | 12696.2 | 12735.7 |
| 47.5° | 11258.9 | 11477.4 | 11764.3 | 12185.5 | 12246.1 |
| 50° | 10498.1 | 10771.9 | 11129.9 | 11635.3 | 11672.2 |
| 52.5° | 9650.5 | 10024.3 | 10498.1 | 10982.5 | 10937.7 |
| 55° | 8800.2 | 9224.0 | 9853.2 | 10248.0 | 10224.4 |
| 57.5° | 7952.6 | 8429.0 | 9192.4 | 9474.1 | 9471.5 |
| 60° | 7004.9 | 7607.7 | 8442.2 | 8655.4 | 8444.8 |
| 62.5° | 6128.3 | 6775.9 | 7641.9 | 7486.6 | 6765.3 |
| 65° | 5164.8 | 5973.0 | 6781.1 | 5722.9 | 4672.6 |
| 67.5° | 4309.3 | 5151.7 | 5759.8 | 3919.7 | 3356.3 |
| 70° | 3448.5 | 4377.7 | 4490.9 | 2908.8 | 2869.3 |
| 72.5° | 2685.1 | 3674.9 | 3098.4 | 2490.3 | 2616.6 |
| 75° | 2032.2 | 2948.3 | 2169.1 | 2219.1 | 2363.9 |
| 77.5° | 1482.1 | 2263.9 | 1687.4 | 1945.4 | 2063.8 |
| 80° | 1018.8 | 1603.1 | 1376.8 | 1634.7 | 1716.3 |
| 82.5° | 639.7 | 1058.2 | 1103.0 | 1316.2 | 1400.5 |
| 85° | 350.1 | 671.3 | 860.8 | 1039.8 | 1089.8 |
| 87.5° | 144.8 | 405.4 | 658.1 | 802.9 | 845.0 |
| 90° | 2.6 | 223.8 | 444.9 | 558.1 | 584.4 |
| 92.5° | 2.6 | 171.1 | 363.3 | 450.1 | 468.6 |
| 95° | 2.6 | 139.5 | 305.4 | 371.2 | 381.7 |
| 97.5° | 5.3 | 110.6 | 255.3 | 308.0 | 318.5 |
| 100° | 7.9 | 92.1 | 213.2 | 258.0 | 265.9 |
| 102.5° | 10.5 | 73.7 | 179.0 | 215.9 | 223.8 |
| 105° | 10.5 | 60.5 | 150.0 | 181.6 | 189.5 |



TEST NUMBER: P830537

CATALOG NUMBER: OHBL-48SE-MCL-UNV-L740-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|-------|
| 112.5° | 18.4 | 36.9 | 89.5 | 113.2 | 118.5 |
| 115° | 21.1 | 31.6 | 76.3 | 97.4 | 102.7 |
| 117.5° | 21.1 | 26.3 | 65.8 | 81.6 | 86.9 |
| 120° | 21.1 | 23.7 | 57.9 | 71.1 | 73.7 |
| 122.5° | 21.1 | 21.1 | 50.0 | 63.2 | 65.8 |
| 125° | 18.4 | 21.1 | 47.4 | 55.3 | 57.9 |
| 127.5° | 21.1 | 21.1 | 42.1 | 50.0 | 52.6 |
| 130° | 21.1 | 23.7 | 36.9 | 47.4 | 47.4 |
| 132.5° | 23.7 | 26.3 | 34.2 | 44.8 | 44.8 |
| 135° | 23.7 | 26.3 | 29.0 | 42.1 | 44.8 |
| 137.5° | 26.3 | 26.3 | 26.3 | 39.5 | 42.1 |
| 140° | 26.3 | 26.3 | 23.7 | 34.2 | 36.9 |
| 142.5° | 23.7 | 26.3 | 23.7 | 31.6 | 34.2 |
| 145° | 23.7 | 26.3 | 26.3 | 29.0 | 31.6 |
| 147.5° | 26.3 | 26.3 | 26.3 | 26.3 | 29.0 |
| 150° | 26.3 | 26.3 | 26.3 | 26.3 | 26.3 |
| 152.5° | 26.3 | 26.3 | 26.3 | 26.3 | 26.3 |
| 155° | 26.3 | 29.0 | 29.0 | 29.0 | 26.3 |
| 157.5° | 26.3 | 29.0 | 29.0 | 29.0 | 29.0 |
| 160° | 26.3 | 29.0 | 29.0 | 29.0 | 29.0 |
| 162.5° | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 |
| 165° | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 |
| 167.5° | 29.0 | 31.6 | 29.0 | 29.0 | 29.0 |
| 170° | 29.0 | 29.0 | 29.0 | 26.3 | 26.3 |
| 172.5° | 29.0 | 29.0 | 29.0 | 26.3 | 26.3 |
| 175° | 29.0 | 29.0 | 26.3 | 23.7 | 23.7 |
| 177.5° | 31.6 | 29.0 | 26.3 | 23.7 | 21.1 |
| 180° | 26.3 | 26.3 | 26.3 | 26.3 | 26.3 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|------|-------|-------|-------|
| 107.5° | 13.2 | 50.0 | 129.0 | 155.3 | 160.6 |
| 110° | 15.8 | 42.1 | 107.9 | 131.6 | 136.9 |



(END OF REPORT)