

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: P830527

Luminaire Tested: **OHBL-48SE-A-UNV-L830-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830527
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-A-UNV-L830-CD
Description: 48000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 3000K LEDS AND AISLE LENS
Light Source: -
Ballast/Driver: -

Summary

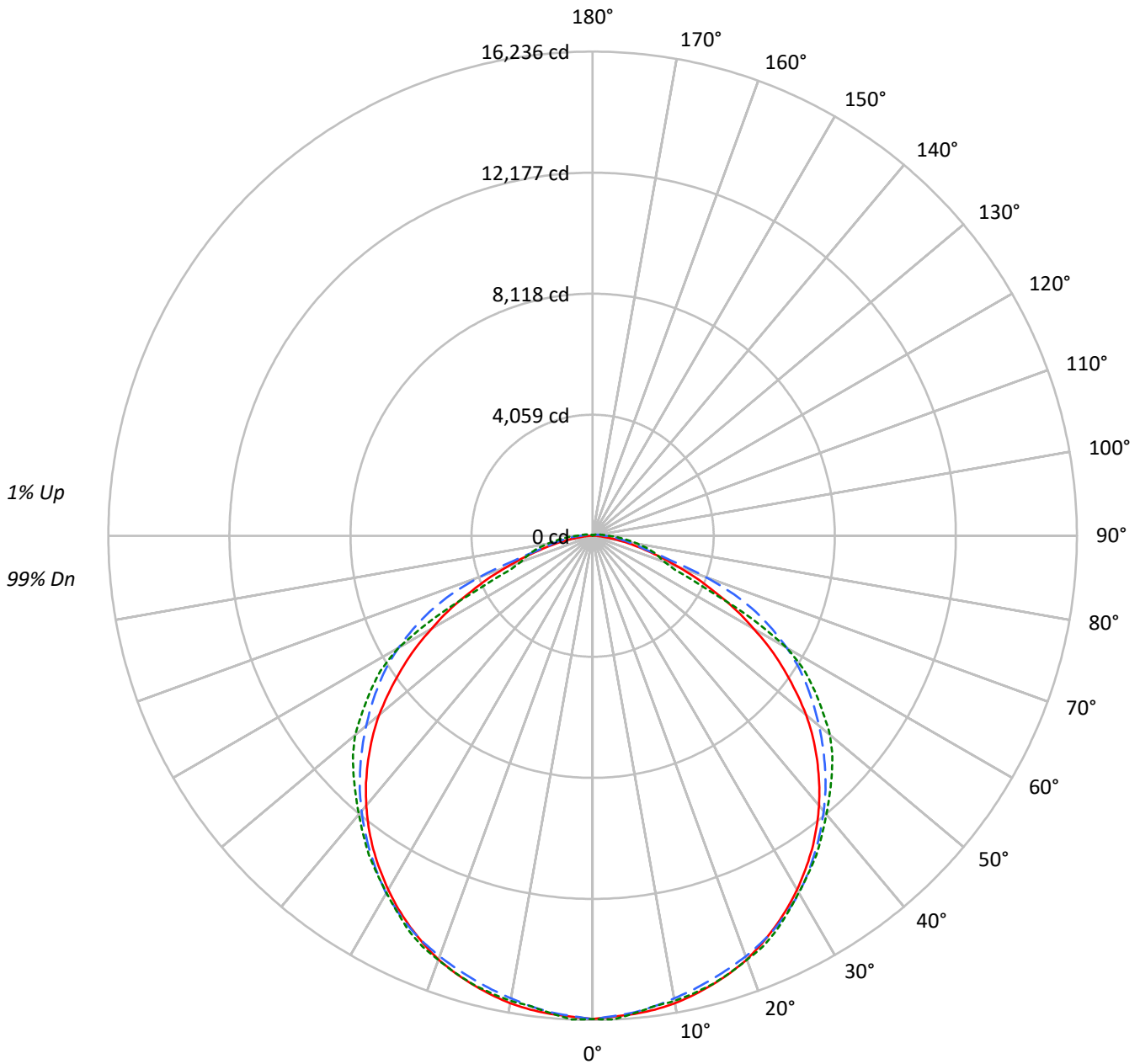
Lumens per Lamp: N/A
Luminaire Lumens: 45798.9 lumens
Efficiency: N/A
Efficacy: 158.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 288.8
Input Voltage (V): NR
Input Current (Ain): 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: P830527

CATALOG NUMBER: OHBL-48SE-A-UNV-L830-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830527

CATALOG NUMBER: OHBL-48SE-A-UNV-L830-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° | 27676 | 27676 | 27676 |
| 5° | 27495 | 27261 | 27314 |
| 10° | 27394 | 26836 | 26993 |
| 15° | 27220 | 26515 | 26795 |
| 20° | 27046 | 26309 | 26540 |
| 25° | 26720 | 26100 | 26286 |
| 30° | 26365 | 25778 | 25770 |
| 35° | 25941 | 25275 | 25475 |
| 40° | 25389 | 24755 | 25080 |
| 45° | 24624 | 24154 | 24890 |
| 50° | 23588 | 23471 | 24664 |
| 55° | 21942 | 22797 | 23711 |
| 60° | 19786 | 21817 | 21884 |
| 65° | 16973 | 20018 | 13839 |
| 70° | 13671 | 15594 | 10004 |
| 75° | 10250 | 9230 | 10111 |
| 80° | 7134 | 7639 | 9587 |
| 85° | 4060 | 6935 | 8869 |



TEST NUMBER: P830527

CATALOG NUMBER: OHBL-48SE-A-UNV-L830-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1527.9 | 3.3 |
| 10°-20° | 4381.2 | 9.6 |
| 20°-30° | 6691.4 | 14.6 |
| 30°-40° | 8119.0 | 17.7 |
| 40°-50° | 8509.5 | 18.6 |
| 50°-60° | 7710.9 | 16.8 |
| 60°-70° | 5169.8 | 11.3 |
| 70°-80° | 2321.5 | 5.1 |
| 80°-90° | 842.4 | 1.8 |
| 90°-100° | 253.6 | 0.6 |
| 100°-110° | 119.6 | 0.3 |
| 110°-120° | 60.0 | 0.1 |
| 120°-130° | 33.1 | 0.1 |
| 130°-140° | 22.7 | 0.0 |
| 140°-150° | 15.3 | 0.0 |
| 150°-160° | 11.4 | 0.0 |
| 160°-170° | 7.3 | 0.0 |
| 170°-180° | 2.3 | 0.0 |
| 0°-30° | 12600.5 | 27.5 |
| 0°-40° | 20719.5 | 45.2 |
| 0°-60° | 36939.9 | 80.7 |
| 0°-90° | 45273.7 | 98.9 |
| 90°-120° | 433.2 | 0.9 |
| 90°-150° | 504.3 | 1.1 |
| 90°-180° | 525.0 | 1.1 |
| 0°-180° | 45798.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 16204 | 16204 | 16204 | 16204 | 16204 | |
| 5° | 16098 | 16154 | 16042 | 16091 | 16070 | ### |
| 15° | 15576 | 15515 | 15405 | 15541 | 15559 | 4398 |
| 25° | 14470 | 14407 | 14507 | 14641 | 14599 | 6670 |
| 35° | 12825 | 12856 | 12987 | 13125 | 13074 | 8016 |
| 45° | 10644 | 10817 | 11019 | 11300 | 11335 | 8199 |
| 55° | 7832 | 8210 | 8770 | 9121 | 9100 | 6991 |
| 65° | 4597 | 5316 | 6035 | 5094 | 4159 | 4580 |
| 75° | 1809 | 2624 | 1931 | 1975 | 2104 | 1977 |
| 85° | 312 | 597 | 766 | 926 | 970 | 380 |
| 90° | 2 | 199 | 396 | 497 | 520 | 19 |
| 95° | 2 | 124 | 272 | 330 | 340 | 3 |
| 105° | 9 | 54 | 134 | 162 | 169 | 11 |
| 115° | 19 | 28 | 68 | 87 | 91 | 17 |
| 125° | 16 | 19 | 42 | 49 | 52 | 16 |
| 135° | 21 | 23 | 26 | 38 | 40 | 17 |
| 145° | 21 | 23 | 23 | 26 | 28 | 14 |
| 155° | 23 | 26 | 26 | 26 | 23 | 11 |
| 165° | 26 | 26 | 26 | 26 | 26 | 7 |
| 175° | 26 | 26 | 23 | 21 | 21 | 2 |
| 180° | 23 | 23 | 23 | 23 | 23 | |



TEST NUMBER: P830527

CATALOG NUMBER: OHBL-48SE-A-UNV-L830-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 16203.7 | 16203.7 | 16203.7 | 16203.7 | 16203.7 |
| 2.5° | 16138.1 | 16206.1 | 16121.7 | 16213.1 | 16236.5 |
| 5° | 16098.3 | 16154.5 | 16042.1 | 16091.3 | 16070.2 |
| 7.5° | 16025.7 | 16044.4 | 15910.9 | 15950.7 | 15908.5 |
| 10° | 15917.9 | 15908.5 | 15751.5 | 15828.9 | 15838.2 |
| 12.5° | 15758.6 | 15730.5 | 15589.9 | 15707.0 | 15709.4 |
| 15° | 15575.8 | 15514.9 | 15404.8 | 15540.7 | 15559.4 |
| 17.5° | 15365.0 | 15285.3 | 15212.7 | 15388.4 | 15360.3 |
| 20° | 15118.9 | 15025.2 | 15011.2 | 15203.3 | 15133.0 |
| 22.5° | 14814.4 | 14741.7 | 14774.5 | 14957.3 | 14912.8 |
| 25° | 14470.0 | 14406.7 | 14507.4 | 14641.0 | 14598.8 |
| 27.5° | 14106.8 | 14069.3 | 14184.1 | 14287.2 | 14205.2 |
| 30° | 13708.5 | 13687.4 | 13839.7 | 13924.1 | 13821.0 |
| 32.5° | 13275.1 | 13282.1 | 13427.3 | 13542.2 | 13446.1 |
| 35° | 12825.2 | 12855.7 | 12986.9 | 13125.1 | 13073.6 |
| 37.5° | 12330.9 | 12398.8 | 12530.0 | 12687.0 | 12633.1 |
| 40° | 11808.4 | 11906.8 | 12052.0 | 12241.8 | 12192.6 |
| 42.5° | 11243.7 | 11367.9 | 11555.3 | 11766.2 | 11761.5 |
| 45° | 10643.9 | 10817.3 | 11018.8 | 11300.0 | 11335.1 |
| 47.5° | 10020.7 | 10215.2 | 10470.6 | 10845.4 | 10899.3 |
| 50° | 9343.6 | 9587.3 | 9905.9 | 10355.8 | 10388.6 |
| 52.5° | 8589.2 | 8921.9 | 9343.6 | 9774.7 | 9734.9 |
| 55° | 7832.4 | 8209.6 | 8769.6 | 9121.0 | 9100.0 |
| 57.5° | 7078.0 | 7502.1 | 8181.5 | 8432.2 | 8429.9 |
| 60° | 6234.5 | 6771.1 | 7513.8 | 7703.6 | 7516.1 |
| 62.5° | 5454.3 | 6030.7 | 6801.5 | 6663.3 | 6021.3 |
| 65° | 4596.8 | 5316.1 | 6035.4 | 5093.5 | 4158.7 |
| 67.5° | 3835.4 | 4585.1 | 5126.3 | 3488.6 | 2987.2 |
| 70° | 3069.2 | 3896.3 | 3997.0 | 2588.9 | 2553.8 |
| 72.5° | 2389.8 | 3270.7 | 2757.6 | 2216.4 | 2328.9 |
| 75° | 1808.7 | 2624.1 | 1930.6 | 1975.1 | 2104.0 |
| 77.5° | 1319.1 | 2014.9 | 1501.8 | 1731.4 | 1836.9 |
| 80° | 906.7 | 1426.8 | 1225.4 | 1455.0 | 1527.6 |
| 82.5° | 569.3 | 941.9 | 981.7 | 1171.5 | 1246.4 |
| 85° | 311.6 | 597.4 | 766.1 | 925.5 | 970.0 |
| 87.5° | 128.9 | 360.8 | 585.7 | 714.6 | 752.1 |
| 90° | 2.3 | 199.1 | 396.0 | 496.7 | 520.1 |
| 92.5° | 2.3 | 152.3 | 323.3 | 400.6 | 417.0 |
| 95° | 2.3 | 124.2 | 271.8 | 330.4 | 339.7 |
| 97.5° | 4.7 | 98.4 | 227.3 | 274.1 | 283.5 |
| 100° | 7.0 | 82.0 | 189.8 | 229.6 | 236.6 |
| 102.5° | 9.4 | 65.6 | 159.3 | 192.1 | 199.1 |
| 105° | 9.4 | 53.9 | 133.5 | 161.7 | 168.7 |



TEST NUMBER: P830527

CATALOG NUMBER: OHBL-48SE-A-UNV-L830-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|-------|
| 112.5° | 16.4 | 32.8 | 79.7 | 100.7 | 105.4 |
| 115° | 18.7 | 28.1 | 67.9 | 86.7 | 91.4 |
| 117.5° | 18.7 | 23.4 | 58.6 | 72.6 | 77.3 |
| 120° | 18.7 | 21.1 | 51.5 | 63.3 | 65.6 |
| 122.5° | 18.7 | 18.7 | 44.5 | 56.2 | 58.6 |
| 125° | 16.4 | 18.7 | 42.2 | 49.2 | 51.5 |
| 127.5° | 18.7 | 18.7 | 37.5 | 44.5 | 46.9 |
| 130° | 18.7 | 21.1 | 32.8 | 42.2 | 42.2 |
| 132.5° | 21.1 | 23.4 | 30.5 | 39.8 | 39.8 |
| 135° | 21.1 | 23.4 | 25.8 | 37.5 | 39.8 |
| 137.5° | 23.4 | 23.4 | 23.4 | 35.1 | 37.5 |
| 140° | 23.4 | 23.4 | 21.1 | 30.5 | 32.8 |
| 142.5° | 21.1 | 23.4 | 21.1 | 28.1 | 30.5 |
| 145° | 21.1 | 23.4 | 23.4 | 25.8 | 28.1 |
| 147.5° | 23.4 | 23.4 | 23.4 | 23.4 | 25.8 |
| 150° | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 |
| 152.5° | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 |
| 155° | 23.4 | 25.8 | 25.8 | 25.8 | 23.4 |
| 157.5° | 23.4 | 25.8 | 25.8 | 25.8 | 25.8 |
| 160° | 23.4 | 25.8 | 25.8 | 25.8 | 25.8 |
| 162.5° | 25.8 | 25.8 | 25.8 | 25.8 | 25.8 |
| 165° | 25.8 | 25.8 | 25.8 | 25.8 | 25.8 |
| 167.5° | 25.8 | 28.1 | 25.8 | 25.8 | 25.8 |
| 170° | 25.8 | 25.8 | 25.8 | 23.4 | 23.4 |
| 172.5° | 25.8 | 25.8 | 25.8 | 23.4 | 23.4 |
| 175° | 25.8 | 25.8 | 23.4 | 21.1 | 21.1 |
| 177.5° | 28.1 | 25.8 | 23.4 | 21.1 | 18.7 |
| 180° | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|------|-------|-------|-------|
| 107.5° | 11.7 | 44.5 | 114.8 | 138.2 | 142.9 |
| 110° | 14.1 | 37.5 | 96.1 | 117.1 | 121.8 |



(END OF REPORT)