

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: P830638

Luminaire Tested: **OHBL-60HE-N-UNV-L850-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830638
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-60HE-N-UNV-L850-CD
Description: 60000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND NARROW LENS
Light Source: -
Ballast/Driver: -

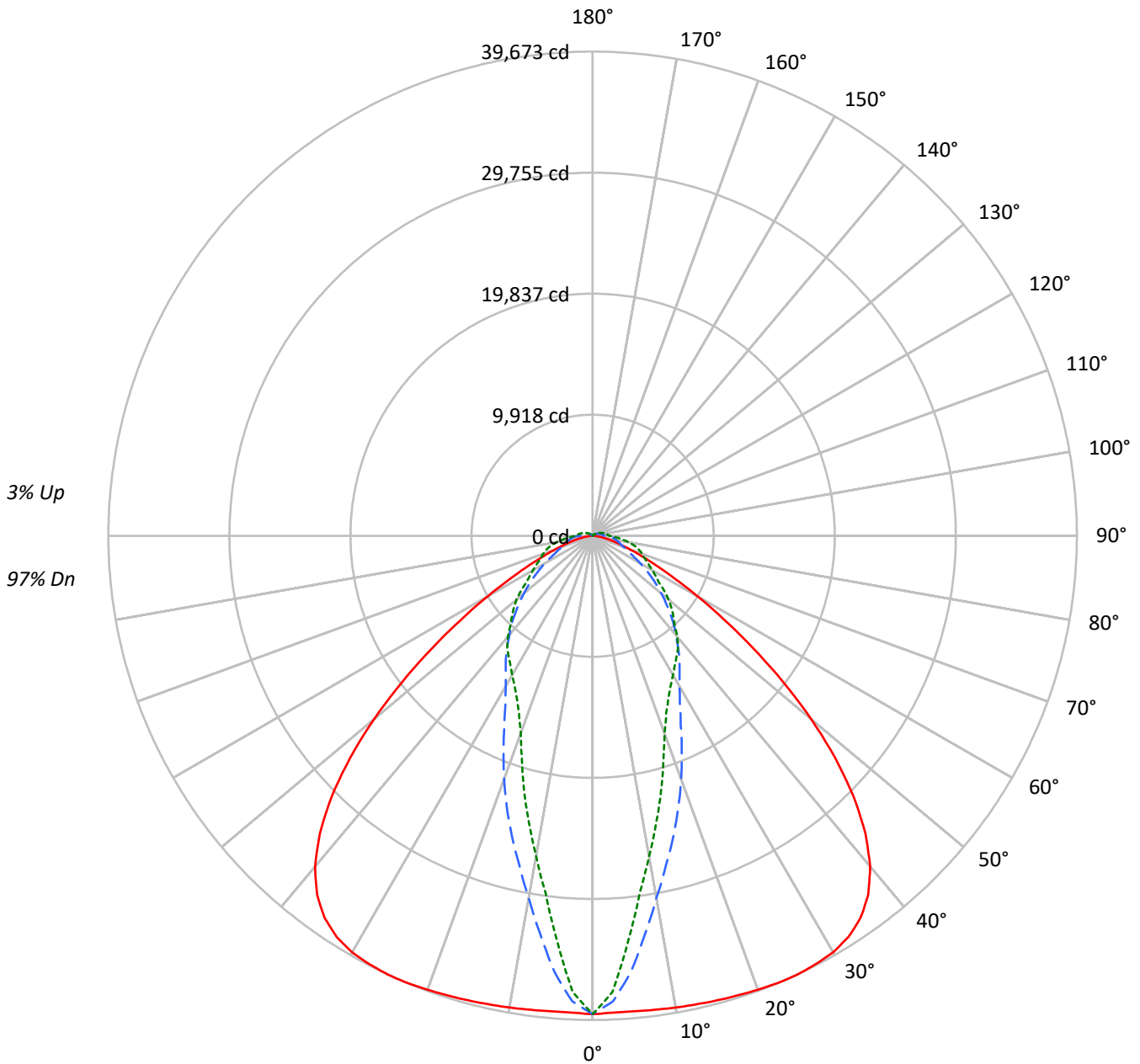
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 57843.0 lumens
Efficiency: N/A
Efficacy: 171.1 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 338
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: P830638
CATALOG NUMBER: OHBL-60HE-N-UNV-L850-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830638

CATALOG NUMBER: OHBL-60HE-N-UNV-L850-CD

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 | 109 | 104 | 100 | 97 | 106 | 102 | 98 | 95 | 97 | 94 | 91 | 92 | 90 | 88 | 88 | 86 | 85 | 85 | 85 | 85 | 82 |
| 2 | 100 | 93 | 86 | 81 | 97 | 90 | 85 | 80 | 86 | 82 | 78 | 83 | 79 | 75 | 79 | 76 | 73 | 73 | 73 | 73 | 71 |
| 3 | 92 | 83 | 75 | 69 | 90 | 81 | 74 | 69 | 78 | 72 | 67 | 74 | 70 | 65 | 72 | 67 | 64 | 64 | 64 | 64 | 62 |
| 4 | 85 | 74 | 66 | 60 | 83 | 73 | 66 | 60 | 70 | 64 | 59 | 67 | 62 | 57 | 65 | 60 | 56 | 56 | 56 | 56 | 54 |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 59 | 53 | 64 | 57 | 52 | 62 | 56 | 51 | 59 | 54 | 50 | 50 | 50 | 50 | 48 |
| 6 | 74 | 62 | 53 | 47 | 72 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | 55 | 49 | 45 | 45 | 45 | 45 | 43 |
| 7 | 69 | 56 | 48 | 43 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 41 | 50 | 45 | 41 | 41 | 41 | 41 | 39 |
| 8 | 65 | 52 | 44 | 39 | 63 | 51 | 44 | 39 | 50 | 43 | 38 | 48 | 42 | 38 | 47 | 41 | 37 | 37 | 37 | 37 | 35 |
| 9 | 61 | 48 | 41 | 35 | 59 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 38 | 34 | 34 | 34 | 34 | 32 |
| 10 | 57 | 45 | 37 | 33 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 41 | 35 | 32 | 32 | 32 | 32 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 61981 | 61981 | 61981 |
| 5° | 61855 | 56470 | 52513 |
| 10° | 62552 | 47588 | 42134 |
| 15° | 63774 | 40718 | 34605 |
| 20° | 65566 | 34445 | 28008 |
| 25° | 67833 | 28525 | 24558 |
| 30° | 70178 | 24587 | 22831 |
| 35° | 71638 | 22420 | 21770 |
| 40° | 70412 | 20265 | 20672 |
| 45° | 64776 | 18326 | 19157 |
| 50° | 54651 | 16203 | 18001 |
| 55° | 41527 | 14206 | 16041 |
| 60° | 29101 | 12198 | 15383 |
| 65° | 19575 | 10521 | 15093 |
| 70° | 13369 | 9894 | 15880 |
| 75° | 9277 | 10234 | 17039 |
| 80° | 6387 | 11388 | 17662 |
| 85° | 3735 | 14374 | 18774 |



TEST NUMBER: P830638

CATALOG NUMBER: OHBL-60HE-N-UNV-L850-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 3299.1 | 5.7 |
| 10°-20° | 7761.0 | 13.4 |
| 20°-30° | 9728.3 | 16.8 |
| 30°-40° | 10322.8 | 17.8 |
| 40°-50° | 9333.5 | 16.1 |
| 50°-60° | 6767.4 | 11.7 |
| 60°-70° | 4246.9 | 7.3 |
| 70°-80° | 2810.4 | 4.9 |
| 80°-90° | 1619.1 | 2.8 |
| 90°-100° | 784.4 | 1.4 |
| 100°-110° | 541.4 | 0.9 |
| 110°-120° | 334.1 | 0.6 |
| 120°-130° | 161.8 | 0.3 |
| 130°-140° | 74.4 | 0.1 |
| 140°-150° | 40.7 | 0.1 |
| 150°-160° | 17.7 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 20788.4 | 35.9 |
| 0°-40° | 31111.3 | 53.8 |
| 0°-60° | 47212.1 | 81.6 |
| 0°-90° | 55888.5 | 96.6 |
| 90°-120° | 1659.9 | 2.9 |
| 90°-150° | 1936.8 | 3.3 |
| 90°-180° | 1954.0 | 3.4 |
| 0°-180° | 57843.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|-------|
| 0° | 39192 | 39192 | 39192 | 39192 | 39192 | |
| 5° | 39113 | 38110 | 35872 | 34208 | 33347 | ### |
| 15° | 39412 | 32123 | 25514 | 22690 | 21660 | 11177 |
| 25° | 39673 | 24838 | 17084 | 15163 | 14682 | 18328 |
| 35° | 38252 | 16513 | 12399 | 12011 | 12007 | 23779 |
| 45° | 30240 | 10459 | 8986 | 9202 | 9359 | 23036 |
| 55° | 16009 | 6483 | 5864 | 6360 | 6587 | 14465 |
| 65° | 5726 | 3760 | 3394 | 4349 | 4834 | 5958 |
| 75° | 1768 | 2025 | 2279 | 3540 | 3752 | 1971 |
| 85° | 310 | 839 | 1667 | 2320 | 2130 | 371 |
| 90° | 0 | 351 | 966 | 1362 | 1373 | 20 |
| 95° | 15 | 246 | 850 | 1156 | 1208 | 13 |
| 105° | 30 | 164 | 619 | 821 | 843 | 30 |
| 115° | 41 | 116 | 418 | 522 | 533 | 40 |
| 125° | 45 | 60 | 213 | 269 | 265 | 39 |
| 135° | 37 | 45 | 93 | 146 | 146 | 29 |
| 145° | 45 | 48 | 56 | 86 | 82 | 27 |
| 155° | 45 | 56 | 60 | 63 | 56 | 14 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P830638

CATALOG NUMBER: OHBL-60HE-N-UNV-L850-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 39191.7 | 39191.7 | 39191.7 | 39191.7 | 39191.7 |
| 2.5° | 39109.7 | 38885.9 | 38188.3 | 37763.1 | 37405.0 |
| 5° | 39113.4 | 38110.0 | 35872.0 | 34208.4 | 33346.7 |
| 7.5° | 39169.3 | 36938.8 | 32906.6 | 30478.3 | 29530.9 |
| 10° | 39255.1 | 35487.8 | 30138.9 | 27550.2 | 26666.2 |
| 12.5° | 39318.5 | 33854.0 | 27703.1 | 25043.6 | 24073.8 |
| 15° | 39411.8 | 32123.3 | 25513.6 | 22689.9 | 21660.4 |
| 17.5° | 39497.6 | 30493.2 | 23350.2 | 20399.7 | 19254.6 |
| 20° | 39583.4 | 28736.4 | 21186.7 | 18146.7 | 17203.0 |
| 22.5° | 39665.4 | 26882.5 | 19075.5 | 16397.3 | 15752.0 |
| 25° | 39672.9 | 24838.5 | 17083.7 | 15162.7 | 14681.5 |
| 27.5° | 39575.9 | 22719.8 | 15468.5 | 14129.5 | 13831.1 |
| 30° | 39408.1 | 20664.5 | 14215.3 | 13383.4 | 13170.8 |
| 32.5° | 38990.3 | 18568.2 | 13245.4 | 12663.5 | 12540.5 |
| 35° | 38251.7 | 16513.0 | 12398.7 | 12010.8 | 12007.1 |
| 37.5° | 37088.0 | 14689.0 | 11481.1 | 11414.0 | 11496.0 |
| 40° | 35368.4 | 13092.5 | 10612.0 | 10791.1 | 10791.1 |
| 42.5° | 33074.4 | 11704.9 | 9825.0 | 10007.7 | 9959.3 |
| 45° | 30239.6 | 10459.1 | 8985.7 | 9202.1 | 9358.7 |
| 47.5° | 26953.4 | 9362.4 | 8127.8 | 8545.6 | 8761.9 |
| 50° | 23380.0 | 8318.0 | 7344.5 | 7877.9 | 8124.1 |
| 52.5° | 19635.0 | 7351.9 | 6579.8 | 7191.6 | 7389.2 |
| 55° | 16009.4 | 6482.8 | 5863.7 | 6359.7 | 6587.3 |
| 57.5° | 12727.0 | 5654.8 | 5162.4 | 5632.4 | 6102.4 |
| 60° | 9903.3 | 4942.3 | 4502.2 | 5173.6 | 5643.6 |
| 62.5° | 7564.6 | 4308.2 | 3883.0 | 4744.6 | 5214.6 |
| 65° | 5725.6 | 3759.9 | 3394.4 | 4349.2 | 4834.2 |
| 67.5° | 4315.7 | 3286.2 | 3013.9 | 4062.0 | 4535.8 |
| 70° | 3241.4 | 2827.4 | 2708.0 | 3883.0 | 4308.2 |
| 72.5° | 2394.7 | 2405.9 | 2465.6 | 3726.3 | 4050.8 |
| 75° | 1768.0 | 2025.4 | 2279.1 | 3539.8 | 3752.4 |
| 77.5° | 1264.5 | 1678.5 | 2111.2 | 3316.0 | 3390.6 |
| 80° | 876.6 | 1368.9 | 1935.9 | 3021.3 | 2957.9 |
| 82.5° | 548.3 | 1096.6 | 1779.2 | 2696.8 | 2521.5 |
| 85° | 309.6 | 839.3 | 1667.3 | 2320.1 | 2129.9 |
| 87.5° | 138.0 | 626.6 | 1458.5 | 1809.1 | 1689.7 |
| 90° | 0.0 | 350.6 | 966.1 | 1361.5 | 1372.7 |
| 92.5° | 7.5 | 290.9 | 891.5 | 1245.8 | 1283.1 |
| 95° | 14.9 | 246.2 | 850.5 | 1156.3 | 1208.5 |
| 97.5° | 18.7 | 216.3 | 798.2 | 1074.3 | 1119.0 |
| 100° | 22.4 | 194.0 | 734.8 | 988.5 | 1025.8 |
| 102.5° | 26.1 | 179.0 | 675.1 | 898.9 | 928.8 |
| 105° | 29.8 | 164.1 | 619.2 | 820.6 | 843.0 |



TEST NUMBER: P830638

CATALOG NUMBER: OHBL-60HE-N-UNV-L850-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 37.3 | 126.8 | 466.3 | 589.3 | 608.0 |
| 115° | 41.0 | 115.6 | 417.8 | 522.2 | 533.4 |
| 117.5° | 44.8 | 100.7 | 365.5 | 458.8 | 462.5 |
| 120° | 44.8 | 89.5 | 313.3 | 391.7 | 391.7 |
| 122.5° | 44.8 | 74.6 | 261.1 | 324.5 | 320.8 |
| 125° | 44.8 | 59.7 | 212.6 | 268.6 | 264.8 |
| 127.5° | 41.0 | 48.5 | 171.6 | 223.8 | 220.1 |
| 130° | 41.0 | 48.5 | 138.0 | 190.2 | 190.2 |
| 132.5° | 37.3 | 44.8 | 111.9 | 164.1 | 164.1 |
| 135° | 37.3 | 44.8 | 93.3 | 145.5 | 145.5 |
| 137.5° | 37.3 | 48.5 | 78.3 | 126.8 | 126.8 |
| 140° | 37.3 | 44.8 | 67.1 | 111.9 | 111.9 |
| 142.5° | 41.0 | 44.8 | 59.7 | 97.0 | 97.0 |
| 145° | 44.8 | 48.5 | 56.0 | 85.8 | 82.1 |
| 147.5° | 44.8 | 52.2 | 56.0 | 74.6 | 70.9 |
| 150° | 44.8 | 56.0 | 56.0 | 67.1 | 63.4 |
| 152.5° | 44.8 | 56.0 | 56.0 | 63.4 | 59.7 |
| 155° | 44.8 | 56.0 | 59.7 | 63.4 | 56.0 |
| 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° | 29.8 | 152.9 | 567.0 | 734.8 | 760.9 |
| 110° | 33.6 | 138.0 | 518.5 | 656.5 | 682.6 |



(END OF REPORT)