

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: P830518

Luminaire Tested: **OHBL-48HE-W-UNV-L850-CD**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P830518
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-48HE-W-UNV-L850-CD
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND WIDE LENS
Light Source: -
Ballast/Driver: -

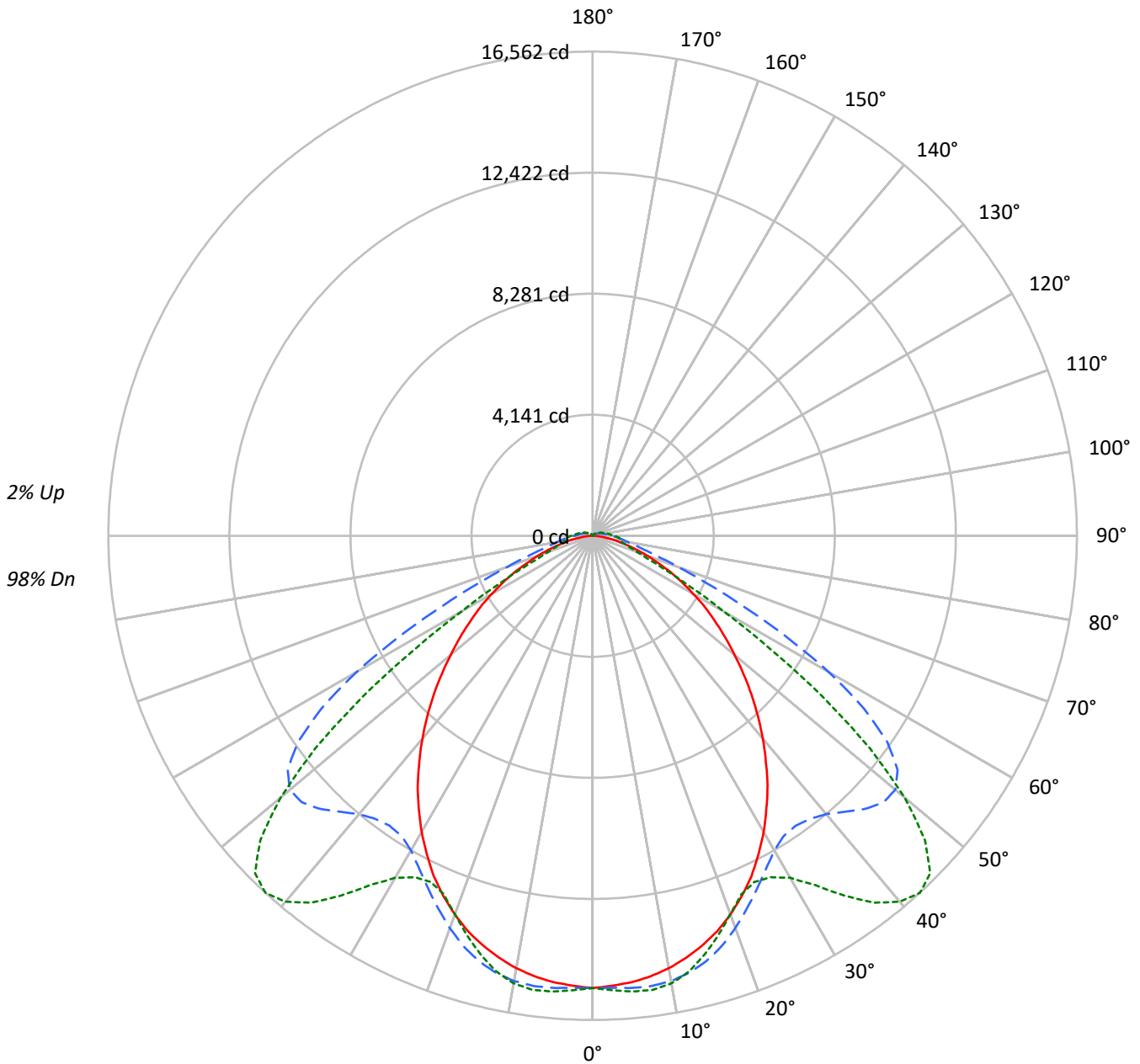
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46323.0 lumens
Efficiency: N/A
Efficacy: 174.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 266
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: P830518
CATALOG NUMBER: OHBL-48HE-W-UNV-L850-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830518

CATALOG NUMBER: OHBL-48HE-W-UNV-L850-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 | 105 | 105 | 105 | 100 | 100 | 100 | 98 | | | | | | | | | | | | | | | | | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 | | | | | | | | | | | | | | | | | | | |
| 2 | 99 | 91 | 85 | 79 | 96 | 89 | 83 | 78 | 85 | 80 | 76 | 82 | 77 | 74 | 78 | 75 | 72 | 70 | | | | | | | | | | | | | | | | | | | |
| 3 | 90 | 80 | 72 | 66 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 72 | 67 | 62 | 69 | 65 | 61 | 59 | | | | | | | | | | | | | | | | | | | |
| 4 | 83 | 71 | 62 | 56 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 | | | | | | | | | | | | | | | | | | | |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 52 | 47 | 57 | 51 | 46 | 55 | 50 | 45 | 43 | | | | | | | | | | | | | | | | | | | |
| 6 | 70 | 57 | 48 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 41 | 52 | 45 | 40 | 50 | 44 | 40 | 38 | | | | | | | | | | | | | | | | | | | |
| 7 | 65 | 51 | 43 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 36 | 47 | 40 | 35 | 45 | 40 | 35 | 33 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 47 | 38 | 32 | 58 | 46 | 38 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 36 | 30 | 26 | 35 | 30 | 25 | 24 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 24467 | 24467 | 24467 |
| 5° | 24239 | 24444 | 24642 |
| 10° | 23935 | 24418 | 24567 |
| 15° | 23468 | 24025 | 23677 |
| 20° | 22829 | 23210 | 22417 |
| 25° | 21972 | 22221 | 21864 |
| 30° | 20834 | 21488 | 23410 |
| 35° | 19535 | 21897 | 27245 |
| 40° | 18028 | 23730 | 31305 |
| 45° | 16452 | 26937 | 33418 |
| 50° | 14809 | 29809 | 30849 |
| 55° | 13264 | 29800 | 23344 |
| 60° | 11692 | 25240 | 14102 |
| 65° | 10031 | 17454 | 8410 |
| 70° | 8150 | 11305 | 5943 |
| 75° | 6200 | 8124 | 5335 |
| 80° | 4450 | 7167 | 5700 |
| 85° | 3020 | 7942 | 8032 |



TEST NUMBER: P830518

CATALOG NUMBER: OHBL-48HE-W-UNV-L850-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1478.4 | 3.2 |
| 10°-20° | 4186.5 | 9.0 |
| 20°-30° | 6126.2 | 13.2 |
| 30°-40° | 7956.1 | 17.2 |
| 40°-50° | 9715.4 | 21.0 |
| 50°-60° | 8556.0 | 18.5 |
| 60°-70° | 4458.6 | 9.6 |
| 70°-80° | 1912.0 | 4.1 |
| 80°-90° | 918.2 | 2.0 |
| 90°-100° | 431.4 | 0.9 |
| 100°-110° | 268.1 | 0.6 |
| 110°-120° | 158.5 | 0.3 |
| 120°-130° | 86.2 | 0.2 |
| 130°-140° | 43.2 | 0.1 |
| 140°-150° | 20.8 | 0.0 |
| 150°-160° | 7.3 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 11791.1 | 25.5 |
| 0°-40° | 19747.2 | 42.6 |
| 0°-60° | 38018.7 | 82.1 |
| 0°-90° | 45307.4 | 97.8 |
| 90°-120° | 858.1 | 1.9 |
| 90°-150° | 1008.3 | 2.2 |
| 90°-180° | 1016.0 | 2.2 |
| 0°-180° | 46323.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 15471 | 15471 | 15471 | 15471 | 15471 | |
| 5° | 15328 | 15444 | 15528 | 15665 | 15648 | ### |
| 15° | 14503 | 14910 | 15054 | 14940 | 14820 | 4084 |
| 25° | 12851 | 13538 | 13308 | 13058 | 13071 | 5897 |
| 35° | 10431 | 11532 | 12110 | 14122 | 15027 | 6501 |
| 45° | 7680 | 9663 | 13208 | 15992 | 16326 | 5922 |
| 55° | 5114 | 8465 | 12300 | 10785 | 9586 | 4589 |
| 65° | 2934 | 5865 | 5631 | 3131 | 2694 | 2903 |
| 75° | 1182 | 2744 | 1809 | 1238 | 1175 | 1288 |
| 85° | 250 | 978 | 921 | 901 | 911 | 279 |
| 90° | 3 | 354 | 608 | 694 | 711 | 17 |
| 95° | 7 | 207 | 484 | 567 | 584 | 5 |
| 105° | 13 | 117 | 314 | 377 | 384 | 14 |
| 115° | 20 | 67 | 194 | 237 | 244 | 21 |
| 125° | 23 | 33 | 114 | 147 | 150 | 20 |
| 135° | 20 | 20 | 53 | 90 | 94 | 15 |
| 145° | 27 | 20 | 23 | 43 | 50 | 16 |
| 155° | 27 | 27 | 20 | 20 | 20 | 8 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P830518

CATALOG NUMBER: OHBL-48HE-W-UNV-L850-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 15471.0 | 15471.0 | 15471.0 | 15471.0 | 15471.0 |
| 2.5° | 15404.3 | 15471.0 | 15474.4 | 15567.8 | 15557.8 |
| 5° | 15327.5 | 15444.3 | 15527.8 | 15664.6 | 15647.9 |
| 7.5° | 15200.7 | 15384.3 | 15531.1 | 15681.3 | 15668.0 |
| 10° | 15020.4 | 15270.8 | 15464.4 | 15587.9 | 15547.8 |
| 12.5° | 14786.8 | 15117.2 | 15307.5 | 15334.2 | 15257.4 |
| 15° | 14503.1 | 14910.3 | 15053.8 | 14940.3 | 14820.2 |
| 17.5° | 14182.6 | 14659.9 | 14710.0 | 14463.0 | 14312.8 |
| 20° | 13782.1 | 14326.1 | 14276.1 | 13935.6 | 13768.7 |
| 22.5° | 13338.1 | 13959.0 | 13798.8 | 13441.6 | 13281.4 |
| 25° | 12850.8 | 13538.4 | 13308.1 | 13057.8 | 13071.1 |
| 27.5° | 12280.0 | 13061.1 | 12837.5 | 12950.9 | 13164.6 |
| 30° | 11699.2 | 12560.4 | 12423.6 | 13084.5 | 13505.0 |
| 32.5° | 11061.7 | 12046.4 | 12169.9 | 13475.0 | 14162.6 |
| 35° | 10430.8 | 11532.3 | 12109.8 | 14122.5 | 15027.1 |
| 37.5° | 9733.2 | 11011.6 | 12206.6 | 14870.2 | 15818.2 |
| 40° | 9055.6 | 10504.3 | 12426.9 | 15541.1 | 16342.2 |
| 42.5° | 8364.7 | 10050.3 | 12797.4 | 15938.3 | 16562.5 |
| 45° | 7680.4 | 9663.1 | 13208.0 | 15991.7 | 16325.5 |
| 47.5° | 6996.2 | 9336.0 | 13491.7 | 15567.8 | 15414.3 |
| 50° | 6335.3 | 9045.6 | 13511.7 | 14549.8 | 13922.3 |
| 52.5° | 5717.8 | 8778.6 | 13144.5 | 12927.6 | 11952.9 |
| 55° | 5113.6 | 8464.8 | 12300.1 | 10784.7 | 9586.4 |
| 57.5° | 4562.9 | 8030.9 | 10998.3 | 8481.5 | 7173.1 |
| 60° | 3978.7 | 7443.5 | 9316.0 | 6205.1 | 5173.7 |
| 62.5° | 3441.3 | 6712.5 | 7430.1 | 4319.2 | 3718.4 |
| 65° | 2934.0 | 5864.6 | 5631.0 | 3130.9 | 2693.7 |
| 67.5° | 2396.6 | 4986.8 | 4155.7 | 2283.1 | 2002.7 |
| 70° | 1976.0 | 4172.3 | 3094.2 | 1775.7 | 1612.2 |
| 72.5° | 1545.4 | 3398.0 | 2313.1 | 1442.0 | 1351.8 |
| 75° | 1181.6 | 2743.7 | 1809.1 | 1238.4 | 1174.9 |
| 77.5° | 871.2 | 2169.6 | 1455.3 | 1094.8 | 1034.7 |
| 80° | 610.8 | 1709.0 | 1218.3 | 978.0 | 954.6 |
| 82.5° | 410.6 | 1321.8 | 1038.1 | 931.3 | 934.6 |
| 85° | 250.3 | 978.0 | 921.3 | 901.2 | 911.2 |
| 87.5° | 120.2 | 694.3 | 791.1 | 821.1 | 831.1 |
| 90° | 3.3 | 353.8 | 607.5 | 694.3 | 711.0 |
| 92.5° | 0.0 | 270.4 | 534.1 | 620.8 | 637.5 |
| 95° | 6.7 | 206.9 | 484.0 | 567.4 | 584.1 |
| 97.5° | 6.7 | 170.2 | 433.9 | 520.7 | 530.7 |
| 100° | 10.0 | 146.9 | 387.2 | 470.6 | 480.7 |
| 102.5° | 10.0 | 130.2 | 347.1 | 420.6 | 427.2 |
| 105° | 13.4 | 116.8 | 313.8 | 377.2 | 383.9 |



TEST NUMBER: P830518

CATALOG NUMBER: OHBL-48HE-W-UNV-L850-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 20.0 | 80.1 | 220.3 | 267.0 | 273.7 |
| 115° | 20.0 | 66.8 | 193.6 | 237.0 | 243.7 |
| 117.5° | 23.4 | 60.1 | 170.2 | 210.3 | 213.6 |
| 120° | 23.4 | 50.1 | 146.9 | 186.9 | 190.3 |
| 122.5° | 23.4 | 40.1 | 130.2 | 166.9 | 170.2 |
| 125° | 23.4 | 33.4 | 113.5 | 146.9 | 150.2 |
| 127.5° | 20.0 | 23.4 | 96.8 | 130.2 | 133.5 |
| 130° | 20.0 | 20.0 | 80.1 | 113.5 | 120.2 |
| 132.5° | 20.0 | 20.0 | 66.8 | 100.1 | 106.8 |
| 135° | 20.0 | 20.0 | 53.4 | 90.1 | 93.5 |
| 137.5° | 20.0 | 20.0 | 43.4 | 76.8 | 83.4 |
| 140° | 20.0 | 20.0 | 33.4 | 66.8 | 70.1 |
| 142.5° | 23.4 | 20.0 | 30.0 | 56.7 | 60.1 |
| 145° | 26.7 | 20.0 | 23.4 | 43.4 | 50.1 |
| 147.5° | 26.7 | 23.4 | 23.4 | 36.7 | 40.1 |
| 150° | 26.7 | 26.7 | 20.0 | 26.7 | 33.4 |
| 152.5° | 26.7 | 26.7 | 20.0 | 20.0 | 26.7 |
| 155° | 26.7 | 26.7 | 20.0 | 20.0 | 20.0 |
| 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° | 16.7 | 103.5 | 280.4 | 337.1 | 343.8 |
| 110° | 16.7 | 90.1 | 247.0 | 300.4 | 307.1 |



(END OF REPORT)