

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: P830458

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

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P830458
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-48HE-A-UNV-L850-CD
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND AISLE LENS
Light Source: -
Ballast/Driver: -

Summary

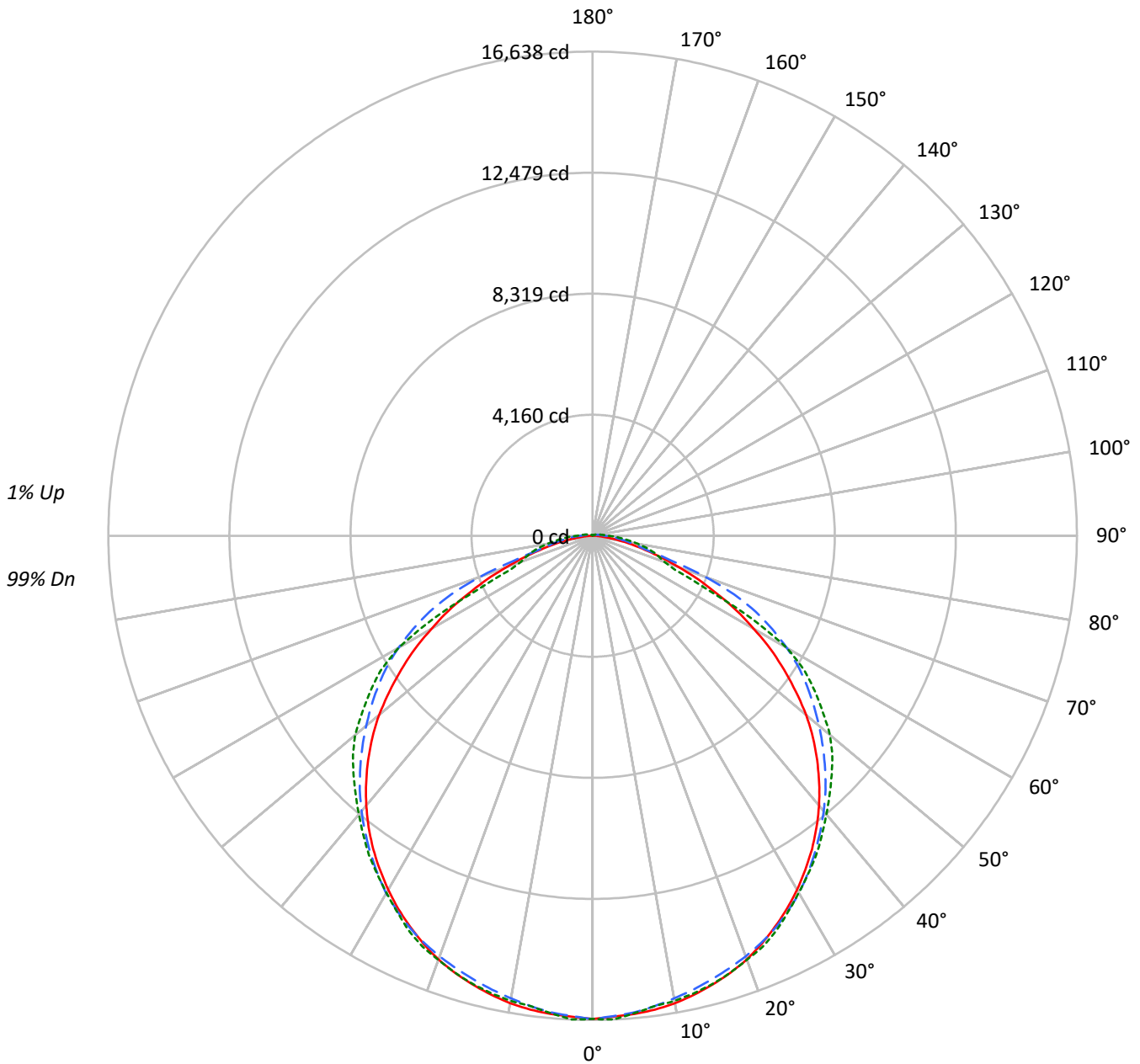
Lumens per Lamp: N/A
Luminaire Lumens: 46930.9 lumens
Efficiency: N/A
Efficacy: 176.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

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: P830458

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

Luminous Intensity Polar Plot





TEST NUMBER: P830458

CATALOG NUMBER: OHBL-48HE-A-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 | 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° | 26259 | 26259 | 26259 |
| 5° | 26087 | 25878 | 25932 |
| 10° | 25992 | 25486 | 25644 |
| 15° | 25827 | 25193 | 25472 |
| 20° | 25662 | 25008 | 25247 |
| 25° | 25352 | 24822 | 25024 |
| 30° | 25015 | 24529 | 24550 |
| 35° | 24613 | 24064 | 24289 |
| 40° | 24089 | 23583 | 23934 |
| 45° | 23364 | 23027 | 23776 |
| 50° | 22381 | 22395 | 23588 |
| 55° | 20819 | 21772 | 22707 |
| 60° | 18773 | 20861 | 20993 |
| 65° | 16105 | 19170 | 13305 |
| 70° | 12972 | 14965 | 9646 |
| 75° | 9725 | 8883 | 9790 |
| 80° | 6769 | 7386 | 9347 |
| 85° | 3853 | 6768 | 8761 |



TEST NUMBER: P830458

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

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1565.6 | 3.3 |
| 10°-20° | 4489.5 | 9.6 |
| 20°-30° | 6856.8 | 14.6 |
| 30°-40° | 8319.7 | 17.7 |
| 40°-50° | 8719.8 | 18.6 |
| 50°-60° | 7901.5 | 16.8 |
| 60°-70° | 5297.6 | 11.3 |
| 70°-80° | 2378.9 | 5.1 |
| 80°-90° | 863.2 | 1.8 |
| 90°-100° | 259.8 | 0.6 |
| 100°-110° | 122.6 | 0.3 |
| 110°-120° | 61.4 | 0.1 |
| 120°-130° | 33.9 | 0.1 |
| 130°-140° | 23.3 | 0.0 |
| 140°-150° | 15.7 | 0.0 |
| 150°-160° | 11.6 | 0.0 |
| 160°-170° | 7.5 | 0.0 |
| 170°-180° | 2.4 | 0.0 |
| 0°-30° | 12911.9 | 27.5 |
| 0°-40° | 21231.6 | 45.2 |
| 0°-60° | 37853.0 | 80.7 |
| 0°-90° | 46392.7 | 98.9 |
| 90°-120° | 443.9 | 0.9 |
| 90°-150° | 516.7 | 1.1 |
| 90°-180° | 538.0 | 1.1 |
| 0°-180° | 46930.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 16604 | 16604 | 16604 | 16604 | 16604 | |
| 5° | 16496 | 16554 | 16439 | 16489 | 16467 | ### |
| 15° | 15961 | 15898 | 15786 | 15925 | 15944 | 4506 |
| 25° | 14828 | 14763 | 14866 | 15003 | 14960 | 6835 |
| 35° | 13142 | 13173 | 13308 | 13450 | 13397 | 8214 |
| 45° | 10907 | 11085 | 11291 | 11579 | 11615 | 8402 |
| 55° | 8026 | 8413 | 8986 | 9346 | 9325 | 7164 |
| 65° | 4710 | 5448 | 6185 | 5219 | 4262 | 4693 |
| 75° | 1854 | 2689 | 1978 | 2024 | 2156 | 2026 |
| 85° | 319 | 612 | 785 | 948 | 994 | 390 |
| 90° | 2 | 204 | 406 | 509 | 533 | 19 |
| 95° | 2 | 127 | 278 | 338 | 348 | 3 |
| 105° | 10 | 55 | 137 | 166 | 173 | 11 |
| 115° | 19 | 29 | 70 | 89 | 94 | 18 |
| 125° | 17 | 19 | 43 | 50 | 53 | 17 |
| 135° | 22 | 24 | 26 | 38 | 41 | 17 |
| 145° | 22 | 24 | 24 | 26 | 29 | 14 |
| 155° | 24 | 26 | 26 | 26 | 24 | 11 |
| 165° | 26 | 26 | 26 | 26 | 26 | 7 |
| 175° | 26 | 26 | 24 | 22 | 22 | 3 |
| 180° | 24 | 24 | 24 | 24 | 24 | |



TEST NUMBER: P830458

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

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 16604.2 | 16604.2 | 16604.2 | 16604.2 | 16604.2 |
| 2.5° | 16537.0 | 16606.6 | 16520.2 | 16613.8 | 16637.8 |
| 5° | 16496.2 | 16553.8 | 16438.6 | 16489.0 | 16467.4 |
| 7.5° | 16421.8 | 16441.0 | 16304.1 | 16344.9 | 16301.7 |
| 10° | 16311.3 | 16301.7 | 16140.9 | 16220.1 | 16229.7 |
| 12.5° | 16148.1 | 16119.3 | 15975.2 | 16095.2 | 16097.6 |
| 15° | 15960.8 | 15898.4 | 15785.5 | 15924.8 | 15944.0 |
| 17.5° | 15744.7 | 15663.1 | 15588.7 | 15768.7 | 15739.9 |
| 20° | 15492.6 | 15396.6 | 15382.2 | 15579.1 | 15507.0 |
| 22.5° | 15180.5 | 15106.1 | 15139.7 | 15327.0 | 15281.4 |
| 25° | 14827.6 | 14762.8 | 14866.0 | 15002.9 | 14959.7 |
| 27.5° | 14455.5 | 14417.1 | 14534.7 | 14640.3 | 14556.3 |
| 30° | 14047.3 | 14025.7 | 14181.8 | 14268.2 | 14162.6 |
| 32.5° | 13603.2 | 13610.4 | 13759.2 | 13876.9 | 13778.4 |
| 35° | 13142.2 | 13173.4 | 13307.9 | 13449.5 | 13396.7 |
| 37.5° | 12635.6 | 12705.3 | 12839.7 | 13000.6 | 12945.3 |
| 40° | 12100.2 | 12201.1 | 12349.9 | 12544.4 | 12494.0 |
| 42.5° | 11521.6 | 11648.9 | 11841.0 | 12057.0 | 12052.2 |
| 45° | 10907.0 | 11084.7 | 11291.2 | 11579.3 | 11615.3 |
| 47.5° | 10268.4 | 10467.7 | 10729.4 | 11113.5 | 11168.7 |
| 50° | 9574.6 | 9824.2 | 10150.8 | 10611.7 | 10645.3 |
| 52.5° | 8801.5 | 9142.4 | 9574.6 | 10016.3 | 9975.5 |
| 55° | 8026.0 | 8412.6 | 8986.4 | 9346.5 | 9324.9 |
| 57.5° | 7252.9 | 7687.5 | 8383.7 | 8640.6 | 8638.2 |
| 60° | 6388.6 | 6938.4 | 7699.5 | 7894.0 | 7701.9 |
| 62.5° | 5589.2 | 6179.8 | 6969.6 | 6828.0 | 6170.2 |
| 65° | 4710.5 | 5447.5 | 6184.6 | 5219.4 | 4261.5 |
| 67.5° | 3930.2 | 4698.4 | 5253.0 | 3574.9 | 3061.1 |
| 70° | 3145.1 | 3992.6 | 4095.8 | 2652.9 | 2616.9 |
| 72.5° | 2448.9 | 3351.6 | 2825.8 | 2271.2 | 2386.4 |
| 75° | 1853.5 | 2688.9 | 1978.3 | 2023.9 | 2156.0 |
| 77.5° | 1351.7 | 2064.7 | 1538.9 | 1774.2 | 1882.3 |
| 80° | 929.1 | 1462.1 | 1255.6 | 1490.9 | 1565.3 |
| 82.5° | 583.4 | 965.1 | 1006.0 | 1200.4 | 1277.2 |
| 85° | 319.3 | 612.2 | 785.1 | 948.3 | 993.9 |
| 87.5° | 132.0 | 369.7 | 600.2 | 732.3 | 770.7 |
| 90° | 2.4 | 204.1 | 405.7 | 509.0 | 533.0 |
| 92.5° | 2.4 | 156.1 | 331.3 | 410.5 | 427.3 |
| 95° | 2.4 | 127.2 | 278.5 | 338.5 | 348.1 |
| 97.5° | 4.8 | 100.8 | 232.9 | 280.9 | 290.5 |
| 100° | 7.2 | 84.0 | 194.5 | 235.3 | 242.5 |
| 102.5° | 9.6 | 67.2 | 163.3 | 196.9 | 204.1 |
| 105° | 9.6 | 55.2 | 136.8 | 165.7 | 172.9 |



TEST NUMBER: P830458

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

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|-------|
| 112.5° | 16.8 | 33.6 | 81.6 | 103.2 | 108.0 |
| 115° | 19.2 | 28.8 | 69.6 | 88.8 | 93.6 |
| 117.5° | 19.2 | 24.0 | 60.0 | 74.4 | 79.2 |
| 120° | 19.2 | 21.6 | 52.8 | 64.8 | 67.2 |
| 122.5° | 19.2 | 19.2 | 45.6 | 57.6 | 60.0 |
| 125° | 16.8 | 19.2 | 43.2 | 50.4 | 52.8 |
| 127.5° | 19.2 | 19.2 | 38.4 | 45.6 | 48.0 |
| 130° | 19.2 | 21.6 | 33.6 | 43.2 | 43.2 |
| 132.5° | 21.6 | 24.0 | 31.2 | 40.8 | 40.8 |
| 135° | 21.6 | 24.0 | 26.4 | 38.4 | 40.8 |
| 137.5° | 24.0 | 24.0 | 24.0 | 36.0 | 38.4 |
| 140° | 24.0 | 24.0 | 21.6 | 31.2 | 33.6 |
| 142.5° | 21.6 | 24.0 | 21.6 | 28.8 | 31.2 |
| 145° | 21.6 | 24.0 | 24.0 | 26.4 | 28.8 |
| 147.5° | 24.0 | 24.0 | 24.0 | 24.0 | 26.4 |
| 150° | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 |
| 152.5° | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 |
| 155° | 24.0 | 26.4 | 26.4 | 26.4 | 24.0 |
| 157.5° | 24.0 | 26.4 | 26.4 | 26.4 | 26.4 |
| 160° | 24.0 | 26.4 | 26.4 | 26.4 | 26.4 |
| 162.5° | 26.4 | 26.4 | 26.4 | 26.4 | 26.4 |
| 165° | 26.4 | 26.4 | 26.4 | 26.4 | 26.4 |
| 167.5° | 26.4 | 28.8 | 26.4 | 26.4 | 26.4 |
| 170° | 26.4 | 26.4 | 26.4 | 24.0 | 24.0 |
| 172.5° | 26.4 | 26.4 | 26.4 | 24.0 | 24.0 |
| 175° | 26.4 | 26.4 | 24.0 | 21.6 | 21.6 |
| 177.5° | 28.8 | 26.4 | 24.0 | 21.6 | 19.2 |
| 180° | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|------|-------|-------|-------|
| 107.5° | 12.0 | 45.6 | 117.6 | 141.6 | 146.5 |
| 110° | 14.4 | 38.4 | 98.4 | 120.0 | 124.8 |



(END OF REPORT)