

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: P830105

Luminaire Tested: **OHBL-24SE-MCL-UNV-L740-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830105
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-24SE-MCL-UNV-L740-CD
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 70CRI, 4000K LEDS AND MEDIUM CLEAR LENS
Light Source: -
Ballast/Driver: -

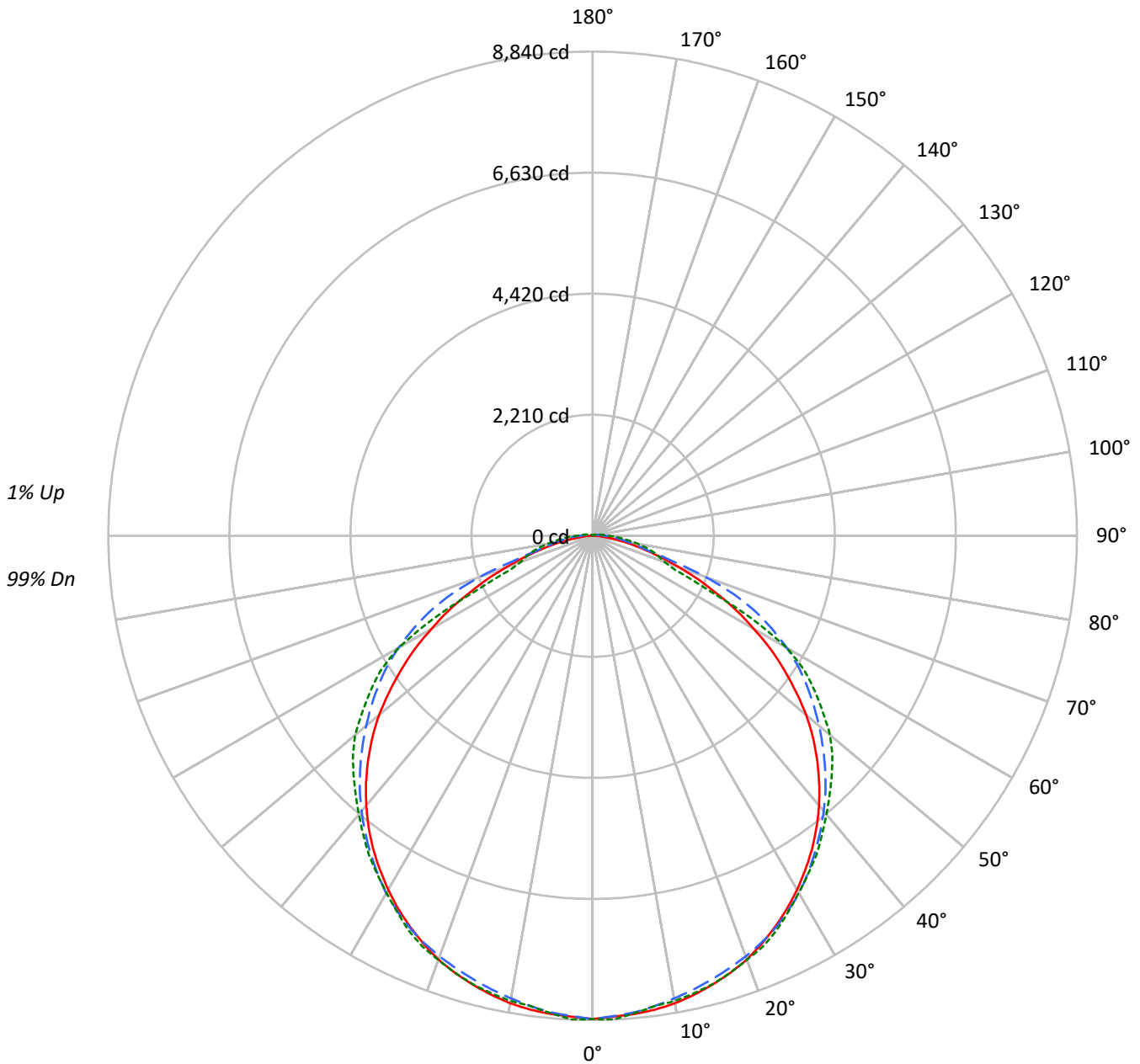
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24936.0 lumens
Efficiency: N/A
Efficacy: 180.7 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): 138
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: P830105
CATALOG NUMBER: OHBL-24SE-MCL-UNV-L740-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830105

CATALOG NUMBER: OHBL-24SE-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° | 15069 | 15069 | 15069 |
| 5° | 14970 | 14843 | 14871 |
| 10° | 14915 | 14612 | 14697 |
| 15° | 14820 | 14437 | 14589 |
| 20° | 14726 | 14324 | 14450 |
| 25° | 14548 | 14211 | 14312 |
| 30° | 14355 | 14035 | 14031 |
| 35° | 14124 | 13761 | 13870 |
| 40° | 13824 | 13478 | 13655 |
| 45° | 13407 | 13151 | 13552 |
| 50° | 12843 | 12779 | 13429 |
| 55° | 11947 | 12412 | 12910 |
| 60° | 10773 | 11878 | 11915 |
| 65° | 9241 | 10899 | 7535 |
| 70° | 7444 | 8491 | 5447 |
| 75° | 5581 | 5025 | 5505 |
| 80° | 3885 | 4159 | 5220 |
| 85° | 2211 | 3776 | 4829 |



TEST NUMBER: P830105

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L740-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 831.9 | 3.3 |
| 10°-20° | 2385.4 | 9.6 |
| 20°-30° | 3643.3 | 14.6 |
| 30°-40° | 4420.5 | 17.7 |
| 40°-50° | 4633.1 | 18.6 |
| 50°-60° | 4198.3 | 16.8 |
| 60°-70° | 2814.8 | 11.3 |
| 70°-80° | 1264.0 | 5.1 |
| 80°-90° | 458.7 | 1.8 |
| 90°-100° | 138.1 | 0.6 |
| 100°-110° | 65.1 | 0.3 |
| 110°-120° | 32.7 | 0.1 |
| 120°-130° | 18.0 | 0.1 |
| 130°-140° | 12.4 | 0.0 |
| 140°-150° | 8.3 | 0.0 |
| 150°-160° | 6.2 | 0.0 |
| 160°-170° | 4.0 | 0.0 |
| 170°-180° | 1.3 | 0.0 |
| 0°-30° | 6860.5 | 27.5 |
| 0°-40° | 11281.1 | 45.2 |
| 0°-60° | 20112.5 | 80.7 |
| 0°-90° | 24650.0 | 98.9 |
| 90°-120° | 235.9 | 0.9 |
| 90°-150° | 274.6 | 1.1 |
| 90°-180° | 286.0 | 1.1 |
| 0°-180° | 24936.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 8822 | 8822 | 8822 | 8822 | 8822 | |
| 5° | 8765 | 8796 | 8734 | 8761 | 8750 | 834 |
| 15° | 8480 | 8447 | 8387 | 8461 | 8472 | 2394 |
| 25° | 7878 | 7844 | 7899 | 7972 | 7949 | 3632 |
| 35° | 6983 | 7000 | 7071 | 7146 | 7118 | 4364 |
| 45° | 5795 | 5890 | 5999 | 6152 | 6172 | 4464 |
| 55° | 4264 | 4470 | 4775 | 4966 | 4955 | 3807 |
| 65° | 2503 | 2894 | 3286 | 2773 | 2264 | 2494 |
| 75° | 985 | 1429 | 1051 | 1075 | 1146 | 1076 |
| 85° | 170 | 325 | 417 | 504 | 528 | 207 |
| 90° | 1 | 108 | 216 | 270 | 283 | 10 |
| 95° | 1 | 68 | 148 | 180 | 185 | 2 |
| 105° | 5 | 29 | 73 | 88 | 92 | 6 |
| 115° | 10 | 15 | 37 | 47 | 50 | 9 |
| 125° | 9 | 10 | 23 | 27 | 28 | 9 |
| 135° | 12 | 13 | 14 | 20 | 22 | 9 |
| 145° | 12 | 13 | 13 | 14 | 15 | 8 |
| 155° | 13 | 14 | 14 | 14 | 13 | 6 |
| 165° | 14 | 14 | 14 | 14 | 14 | 4 |
| 175° | 14 | 14 | 13 | 12 | 12 | 1 |
| 180° | 13 | 13 | 13 | 13 | 13 | |



TEST NUMBER: P830105

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L740-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 8822.4 | 8822.4 | 8822.4 | 8822.4 | 8822.4 |
| 2.5° | 8786.7 | 8823.7 | 8777.7 | 8827.5 | 8840.2 |
| 5° | 8765.0 | 8795.6 | 8734.4 | 8761.1 | 8749.7 |
| 7.5° | 8725.4 | 8735.6 | 8662.9 | 8684.6 | 8661.6 |
| 10° | 8666.7 | 8661.6 | 8576.2 | 8618.3 | 8623.4 |
| 12.5° | 8580.0 | 8564.7 | 8488.2 | 8551.9 | 8553.2 |
| 15° | 8480.5 | 8447.3 | 8387.4 | 8461.4 | 8471.6 |
| 17.5° | 8365.7 | 8322.3 | 8282.8 | 8378.5 | 8363.1 |
| 20° | 8231.8 | 8180.7 | 8173.1 | 8277.7 | 8239.4 |
| 22.5° | 8065.9 | 8026.4 | 8044.2 | 8143.7 | 8119.5 |
| 25° | 7878.4 | 7844.0 | 7898.8 | 7971.5 | 7948.6 |
| 27.5° | 7680.7 | 7660.3 | 7722.8 | 7778.9 | 7734.3 |
| 30° | 7463.8 | 7452.3 | 7535.2 | 7581.2 | 7525.0 |
| 32.5° | 7227.8 | 7231.6 | 7310.7 | 7373.2 | 7320.9 |
| 35° | 6982.9 | 6999.5 | 7070.9 | 7146.2 | 7118.1 |
| 37.5° | 6713.7 | 6750.7 | 6822.2 | 6907.6 | 6878.3 |
| 40° | 6429.3 | 6482.8 | 6561.9 | 6665.3 | 6638.5 |
| 42.5° | 6121.8 | 6189.4 | 6291.5 | 6406.3 | 6403.8 |
| 45° | 5795.3 | 5889.7 | 5999.4 | 6152.4 | 6171.6 |
| 47.5° | 5455.9 | 5561.8 | 5700.9 | 5905.0 | 5934.3 |
| 50° | 5087.3 | 5219.9 | 5393.4 | 5638.4 | 5656.2 |
| 52.5° | 4676.5 | 4857.7 | 5087.3 | 5322.0 | 5300.3 |
| 55° | 4264.5 | 4469.9 | 4774.7 | 4966.1 | 4954.6 |
| 57.5° | 3853.7 | 4084.6 | 4454.6 | 4591.1 | 4589.8 |
| 60° | 3394.5 | 3686.6 | 4091.0 | 4194.3 | 4092.3 |
| 62.5° | 2969.7 | 3283.5 | 3703.2 | 3627.9 | 3278.4 |
| 65° | 2502.8 | 2894.4 | 3286.1 | 2773.3 | 2264.3 |
| 67.5° | 2088.2 | 2496.4 | 2791.1 | 1899.4 | 1626.5 |
| 70° | 1671.1 | 2121.4 | 2176.3 | 1409.6 | 1390.5 |
| 72.5° | 1301.2 | 1780.8 | 1501.4 | 1206.8 | 1268.0 |
| 75° | 984.8 | 1428.7 | 1051.1 | 1075.4 | 1145.5 |
| 77.5° | 718.2 | 1097.1 | 817.7 | 942.7 | 1000.1 |
| 80° | 493.7 | 776.9 | 667.2 | 792.2 | 831.7 |
| 82.5° | 310.0 | 512.8 | 534.5 | 637.8 | 678.6 |
| 85° | 169.7 | 325.3 | 417.1 | 503.9 | 528.1 |
| 87.5° | 70.2 | 196.4 | 318.9 | 389.1 | 409.5 |
| 90° | 1.3 | 108.4 | 215.6 | 270.4 | 283.2 |
| 92.5° | 1.3 | 82.9 | 176.0 | 218.1 | 227.1 |
| 95° | 1.3 | 67.6 | 148.0 | 179.9 | 185.0 |
| 97.5° | 2.6 | 53.6 | 123.7 | 149.3 | 154.4 |
| 100° | 3.8 | 44.6 | 103.3 | 125.0 | 128.8 |
| 102.5° | 5.1 | 35.7 | 86.7 | 104.6 | 108.4 |
| 105° | 5.1 | 29.3 | 72.7 | 88.0 | 91.8 |



TEST NUMBER: P830105

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L740-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 112.5° | 8.9 | 17.9 | 43.4 | 54.9 | 57.4 |
| 115° | 10.2 | 15.3 | 37.0 | 47.2 | 49.8 |
| 117.5° | 10.2 | 12.8 | 31.9 | 39.5 | 42.1 |
| 120° | 10.2 | 11.5 | 28.1 | 34.4 | 35.7 |
| 122.5° | 10.2 | 10.2 | 24.2 | 30.6 | 31.9 |
| 125° | 8.9 | 10.2 | 23.0 | 26.8 | 28.1 |
| 127.5° | 10.2 | 10.2 | 20.4 | 24.2 | 25.5 |
| 130° | 10.2 | 11.5 | 17.9 | 23.0 | 23.0 |
| 132.5° | 11.5 | 12.8 | 16.6 | 21.7 | 21.7 |
| 135° | 11.5 | 12.8 | 14.0 | 20.4 | 21.7 |
| 137.5° | 12.8 | 12.8 | 12.8 | 19.1 | 20.4 |
| 140° | 12.8 | 12.8 | 11.5 | 16.6 | 17.9 |
| 142.5° | 11.5 | 12.8 | 11.5 | 15.3 | 16.6 |
| 145° | 11.5 | 12.8 | 12.8 | 14.0 | 15.3 |
| 147.5° | 12.8 | 12.8 | 12.8 | 12.8 | 14.0 |
| 150° | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 152.5° | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 155° | 12.8 | 14.0 | 14.0 | 14.0 | 12.8 |
| 157.5° | 12.8 | 14.0 | 14.0 | 14.0 | 14.0 |
| 160° | 12.8 | 14.0 | 14.0 | 14.0 | 14.0 |
| 162.5° | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 |
| 165° | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 |
| 167.5° | 14.0 | 15.3 | 14.0 | 14.0 | 14.0 |
| 170° | 14.0 | 14.0 | 14.0 | 12.8 | 12.8 |
| 172.5° | 14.0 | 14.0 | 14.0 | 12.8 | 12.8 |
| 175° | 14.0 | 14.0 | 12.8 | 11.5 | 11.5 |
| 177.5° | 15.3 | 14.0 | 12.8 | 11.5 | 10.2 |
| 180° | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-----|------|------|------|------|
| 107.5° | 6.4 | 24.2 | 62.5 | 75.3 | 77.8 |
| 110° | 7.7 | 20.4 | 52.3 | 63.8 | 66.3 |



(END OF REPORT)