

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: P830114

Luminaire Tested: **OHBL-24SE-MCL-UNV-L950-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830114
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-L950-CD
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 90CRI, 5000K LEDS AND MEDIUM CLEAR LENS
Light Source: -
Ballast/Driver: -

Summary

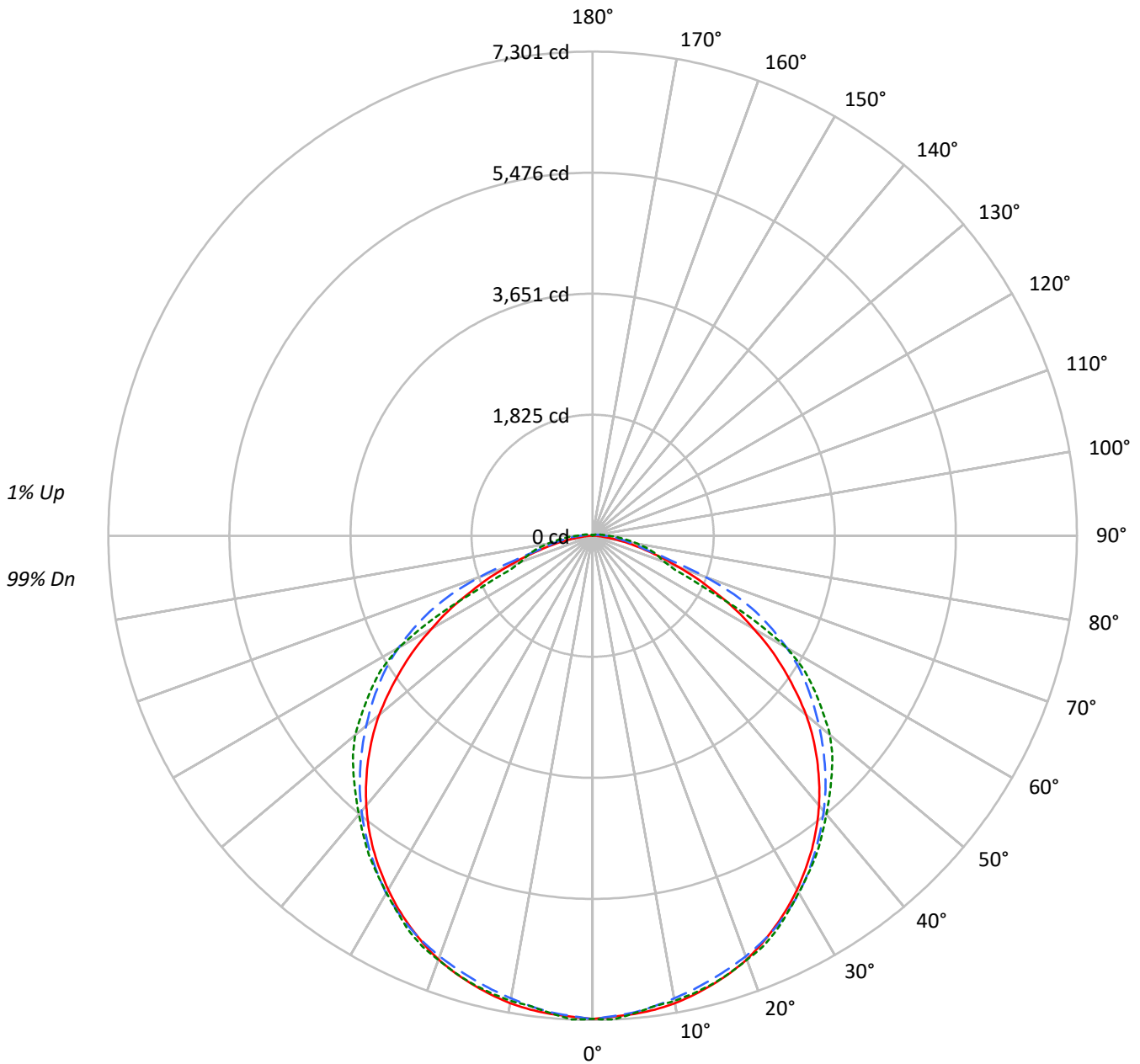
Lumens per Lamp: N/A
Luminaire Lumens: 20593.9 lumens
Efficiency: N/A
Efficacy: 149.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 3.78' x H: 0.17')
CIE Type: Direct

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: P830114

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L950-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830114

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L950-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° | 12445 | 12445 | 12445 |
| 5° | 12363 | 12258 | 12282 |
| 10° | 12318 | 12067 | 12138 |
| 15° | 12240 | 11923 | 12049 |
| 20° | 12162 | 11830 | 11934 |
| 25° | 12015 | 11736 | 11820 |
| 30° | 11855 | 11592 | 11588 |
| 35° | 11665 | 11365 | 11455 |
| 40° | 11417 | 11131 | 11277 |
| 45° | 11073 | 10861 | 11192 |
| 50° | 10607 | 10554 | 11090 |
| 55° | 9866 | 10251 | 10662 |
| 60° | 8897 | 9810 | 9840 |
| 65° | 7632 | 9001 | 6223 |
| 70° | 6147 | 7012 | 4498 |
| 75° | 4609 | 4150 | 4546 |
| 80° | 3208 | 3435 | 4311 |
| 85° | 1826 | 3119 | 3988 |



TEST NUMBER: P830114

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L950-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 687.0 | 3.3 |
| 10°-20° | 1970.0 | 9.6 |
| 20°-30° | 3008.9 | 14.6 |
| 30°-40° | 3650.8 | 17.7 |
| 40°-50° | 3826.4 | 18.6 |
| 50°-60° | 3467.3 | 16.8 |
| 60°-70° | 2324.7 | 11.3 |
| 70°-80° | 1043.9 | 5.1 |
| 80°-90° | 378.8 | 1.8 |
| 90°-100° | 114.0 | 0.6 |
| 100°-110° | 53.8 | 0.3 |
| 110°-120° | 27.0 | 0.1 |
| 120°-130° | 14.9 | 0.1 |
| 130°-140° | 10.2 | 0.0 |
| 140°-150° | 6.9 | 0.0 |
| 150°-160° | 5.1 | 0.0 |
| 160°-170° | 3.3 | 0.0 |
| 170°-180° | 1.0 | 0.0 |
| 0°-30° | 5665.9 | 27.5 |
| 0°-40° | 9316.7 | 45.2 |
| 0°-60° | 16610.4 | 80.7 |
| 0°-90° | 20357.8 | 98.9 |
| 90°-120° | 194.8 | 0.9 |
| 90°-150° | 226.7 | 1.1 |
| 90°-180° | 236.0 | 1.1 |
| 0°-180° | 20593.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 7286 | 7286 | 7286 | 7286 | 7286 | |
| 5° | 7239 | 7264 | 7214 | 7236 | 7226 | 688 |
| 15° | 7004 | 6976 | 6927 | 6988 | 6996 | 1977 |
| 25° | 6507 | 6478 | 6523 | 6584 | 6564 | 2999 |
| 35° | 5767 | 5781 | 5840 | 5902 | 5879 | 3605 |
| 45° | 4786 | 4864 | 4955 | 5081 | 5097 | 3687 |
| 55° | 3522 | 3692 | 3943 | 4101 | 4092 | 3144 |
| 65° | 2067 | 2390 | 2714 | 2290 | 1870 | 2060 |
| 75° | 813 | 1180 | 868 | 888 | 946 | 889 |
| 85° | 140 | 269 | 344 | 416 | 436 | 171 |
| 90° | 1 | 90 | 178 | 223 | 234 | 8 |
| 95° | 1 | 56 | 122 | 148 | 153 | 1 |
| 105° | 4 | 24 | 60 | 73 | 76 | 5 |
| 115° | 8 | 13 | 31 | 39 | 41 | 8 |
| 125° | 7 | 8 | 19 | 22 | 23 | 7 |
| 135° | 10 | 10 | 12 | 17 | 18 | 8 |
| 145° | 10 | 10 | 10 | 12 | 13 | 6 |
| 155° | 10 | 12 | 12 | 12 | 10 | 5 |
| 165° | 12 | 12 | 12 | 12 | 12 | 3 |
| 175° | 12 | 12 | 10 | 10 | 10 | 1 |
| 180° | 10 | 10 | 10 | 10 | 10 | |



TEST NUMBER: P830114

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L950-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 7286.2 | 7286.2 | 7286.2 | 7286.2 | 7286.2 |
| 2.5° | 7256.7 | 7287.2 | 7249.3 | 7290.4 | 7300.9 |
| 5° | 7238.8 | 7264.1 | 7213.5 | 7235.6 | 7226.1 |
| 7.5° | 7206.1 | 7214.5 | 7154.5 | 7172.4 | 7153.4 |
| 10° | 7157.6 | 7153.4 | 7082.8 | 7117.6 | 7121.8 |
| 12.5° | 7086.0 | 7073.4 | 7010.2 | 7062.8 | 7063.9 |
| 15° | 7003.8 | 6976.4 | 6926.9 | 6988.0 | 6996.5 |
| 17.5° | 6909.0 | 6873.2 | 6840.5 | 6919.5 | 6906.9 |
| 20° | 6798.4 | 6756.3 | 6749.9 | 6836.3 | 6804.7 |
| 22.5° | 6661.4 | 6628.8 | 6643.5 | 6725.7 | 6705.7 |
| 25° | 6506.6 | 6478.1 | 6523.4 | 6583.5 | 6564.5 |
| 27.5° | 6343.3 | 6326.4 | 6378.0 | 6424.4 | 6387.5 |
| 30° | 6164.2 | 6154.7 | 6223.2 | 6261.1 | 6214.7 |
| 32.5° | 5969.3 | 5972.4 | 6037.7 | 6089.4 | 6046.2 |
| 35° | 5767.0 | 5780.7 | 5839.7 | 5901.8 | 5878.7 |
| 37.5° | 5544.7 | 5575.3 | 5634.2 | 5704.8 | 5680.6 |
| 40° | 5309.8 | 5354.0 | 5419.3 | 5504.7 | 5482.5 |
| 42.5° | 5055.9 | 5111.7 | 5196.0 | 5290.8 | 5288.7 |
| 45° | 4786.2 | 4864.1 | 4954.7 | 5081.1 | 5097.0 |
| 47.5° | 4505.9 | 4593.4 | 4708.2 | 4876.8 | 4901.0 |
| 50° | 4201.5 | 4311.0 | 4454.3 | 4656.6 | 4671.3 |
| 52.5° | 3862.2 | 4011.8 | 4201.5 | 4395.3 | 4377.4 |
| 55° | 3521.9 | 3691.5 | 3943.3 | 4101.4 | 4091.9 |
| 57.5° | 3182.7 | 3373.4 | 3678.9 | 3791.6 | 3790.6 |
| 60° | 2803.4 | 3044.7 | 3378.7 | 3464.0 | 3379.7 |
| 62.5° | 2452.6 | 2711.8 | 3058.4 | 2996.2 | 2707.6 |
| 65° | 2067.0 | 2390.4 | 2713.9 | 2290.4 | 1870.0 |
| 67.5° | 1724.6 | 2061.7 | 2305.1 | 1568.7 | 1343.2 |
| 70° | 1380.1 | 1752.0 | 1797.3 | 1164.1 | 1148.3 |
| 72.5° | 1074.6 | 1470.7 | 1240.0 | 996.6 | 1047.2 |
| 75° | 813.3 | 1179.9 | 868.1 | 888.1 | 946.1 |
| 77.5° | 593.1 | 906.0 | 675.3 | 778.6 | 826.0 |
| 80° | 407.7 | 641.6 | 551.0 | 654.2 | 686.9 |
| 82.5° | 256.0 | 423.5 | 441.4 | 526.8 | 560.5 |
| 85° | 140.1 | 268.6 | 344.5 | 416.1 | 436.2 |
| 87.5° | 57.9 | 162.2 | 263.4 | 321.3 | 338.2 |
| 90° | 1.1 | 89.5 | 178.0 | 223.3 | 233.9 |
| 92.5° | 1.1 | 68.5 | 145.4 | 180.2 | 187.5 |
| 95° | 1.1 | 55.8 | 122.2 | 148.5 | 152.8 |
| 97.5° | 2.1 | 44.2 | 102.2 | 123.3 | 127.5 |
| 100° | 3.2 | 36.9 | 85.3 | 103.2 | 106.4 |
| 102.5° | 4.2 | 29.5 | 71.6 | 86.4 | 89.5 |
| 105° | 4.2 | 24.2 | 60.1 | 72.7 | 75.9 |



TEST NUMBER: P830114

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L950-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 112.5° | 7.4 | 14.7 | 35.8 | 45.3 | 47.4 |
| 115° | 8.4 | 12.6 | 30.6 | 39.0 | 41.1 |
| 117.5° | 8.4 | 10.5 | 26.3 | 32.7 | 34.8 |
| 120° | 8.4 | 9.5 | 23.2 | 28.4 | 29.5 |
| 122.5° | 8.4 | 8.4 | 20.0 | 25.3 | 26.3 |
| 125° | 7.4 | 8.4 | 19.0 | 22.1 | 23.2 |
| 127.5° | 8.4 | 8.4 | 16.9 | 20.0 | 21.1 |
| 130° | 8.4 | 9.5 | 14.7 | 19.0 | 19.0 |
| 132.5° | 9.5 | 10.5 | 13.7 | 17.9 | 17.9 |
| 135° | 9.5 | 10.5 | 11.6 | 16.9 | 17.9 |
| 137.5° | 10.5 | 10.5 | 10.5 | 15.8 | 16.9 |
| 140° | 10.5 | 10.5 | 9.5 | 13.7 | 14.7 |
| 142.5° | 9.5 | 10.5 | 9.5 | 12.6 | 13.7 |
| 145° | 9.5 | 10.5 | 10.5 | 11.6 | 12.6 |
| 147.5° | 10.5 | 10.5 | 10.5 | 10.5 | 11.6 |
| 150° | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 |
| 152.5° | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 |
| 155° | 10.5 | 11.6 | 11.6 | 11.6 | 10.5 |
| 157.5° | 10.5 | 11.6 | 11.6 | 11.6 | 11.6 |
| 160° | 10.5 | 11.6 | 11.6 | 11.6 | 11.6 |
| 162.5° | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 |
| 165° | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 |
| 167.5° | 11.6 | 12.6 | 11.6 | 11.6 | 11.6 |
| 170° | 11.6 | 11.6 | 11.6 | 10.5 | 10.5 |
| 172.5° | 11.6 | 11.6 | 11.6 | 10.5 | 10.5 |
| 175° | 11.6 | 11.6 | 10.5 | 9.5 | 9.5 |
| 177.5° | 12.6 | 11.6 | 10.5 | 9.5 | 8.4 |
| 180° | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-----|------|------|------|------|
| 107.5° | 5.3 | 20.0 | 51.6 | 62.2 | 64.3 |
| 110° | 6.3 | 16.9 | 43.2 | 52.7 | 54.8 |



(END OF REPORT)