

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: P830770

Luminaire Tested: **OHBL-72SE-MFL-UNV-L850-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830770
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-72SE-MFL-UNV-L850-CD
Description: 72000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 5000K LEDS AND MEDIUM FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

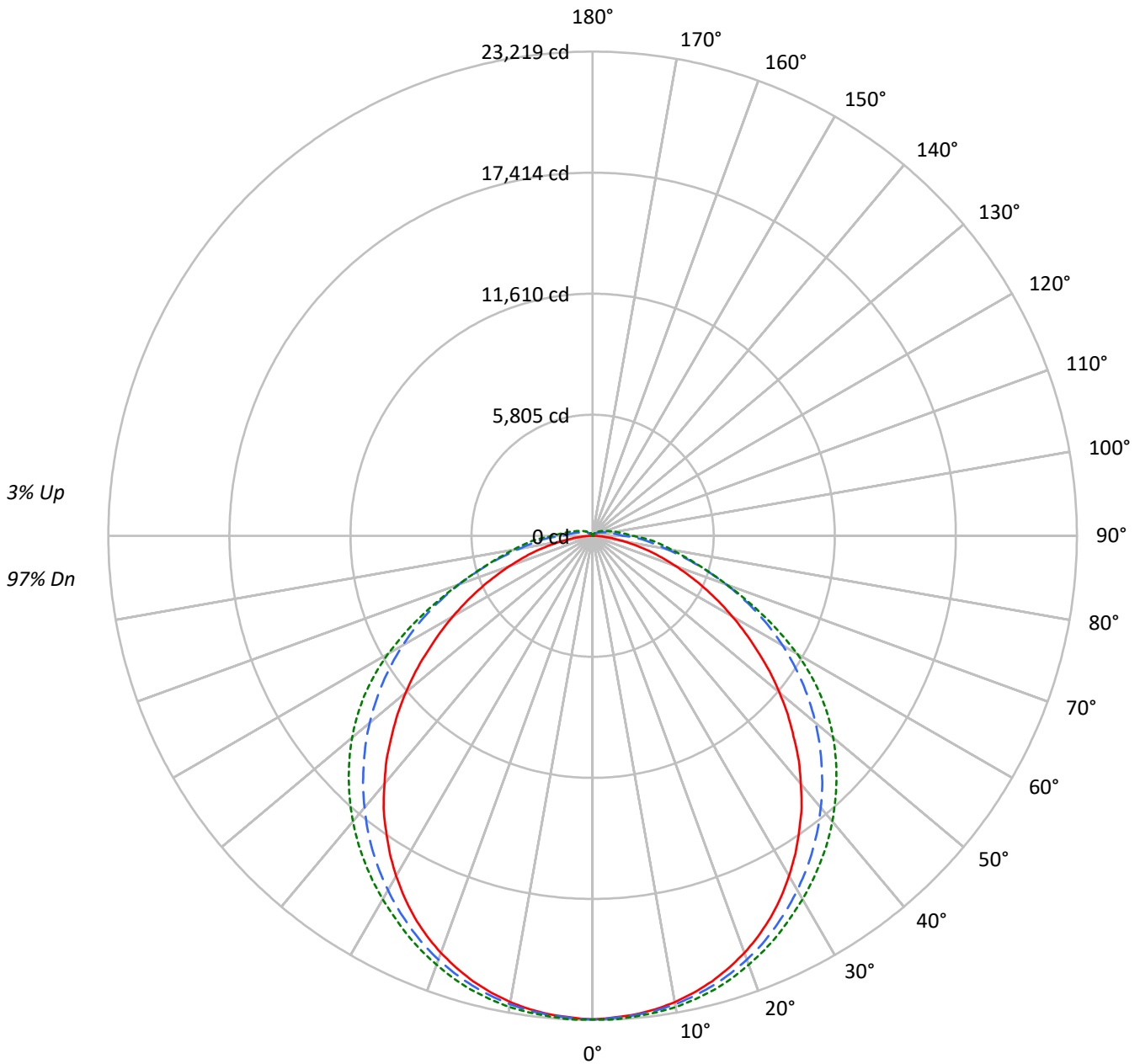
Lumens per Lamp: N/A
Luminaire Lumens: 69423.0 lumens
Efficiency: N/A
Efficacy: 167.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')
CIE Type: Direct

Input Watts (W): 413.7
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: P830770

CATALOG NUMBER: OHBL-72SE-MFL-UNV-L850-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830770

CATALOG NUMBER: OHBL-72SE-MFL-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 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 99 | 99 | 97 | | | | | | | | | | | | | | | | | |
| 1 | 107 | 102 | 98 | 94 | 104 | 100 | 96 | 92 | 95 | 91 | 88 | 90 | 88 | 85 | 86 | 84 | 82 | 82 | 82 | 80 | | | | | | | | | | | | | | | | | |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 77 | 73 | 79 | 74 | 71 | 75 | 72 | 68 | 68 | 68 | 66 | | | | | | | | | | | | | | | | | |
| 3 | 89 | 78 | 70 | 63 | 86 | 76 | 69 | 62 | 73 | 66 | 61 | 70 | 64 | 59 | 67 | 62 | 58 | 58 | 58 | 56 | | | | | | | | | | | | | | | | | |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 57 | 52 | 62 | 56 | 51 | 59 | 54 | 50 | 50 | 50 | 47 | | | | | | | | | | | | | | | | | |
| 5 | 75 | 62 | 53 | 46 | 72 | 60 | 52 | 46 | 58 | 50 | 45 | 56 | 49 | 44 | 53 | 48 | 43 | 43 | 43 | 41 | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 40 | 67 | 54 | 46 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 48 | 43 | 38 | 38 | 38 | 36 | | | | | | | | | | | | | | | | | |
| 7 | 64 | 50 | 42 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 39 | 34 | 44 | 38 | 34 | 34 | 34 | 32 | | | | | | | | | | | | | | | | | |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 30 | 30 | 30 | 28 | | | | | | | | | | | | | | | | | |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 37 | 32 | 27 | 27 | 27 | 25 | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 25 | 25 | 25 | 23 | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 36685 | 36685 | 36685 |
| 5° | 36450 | 36337 | 36448 |
| 10° | 36194 | 36017 | 36257 |
| 15° | 35790 | 35634 | 36007 |
| 20° | 35253 | 35165 | 35640 |
| 25° | 34537 | 34579 | 35269 |
| 30° | 33544 | 33945 | 34896 |
| 35° | 32343 | 33270 | 34573 |
| 40° | 30900 | 32490 | 34256 |
| 45° | 29198 | 31642 | 33851 |
| 50° | 27337 | 30786 | 33360 |
| 55° | 25049 | 29737 | 32529 |
| 60° | 22705 | 28501 | 30871 |
| 65° | 20147 | 26923 | 28146 |
| 70° | 17373 | 24911 | 25195 |
| 75° | 14566 | 22587 | 23201 |
| 80° | 11044 | 20906 | 23017 |
| 85° | 6987 | 21730 | 25721 |



TEST NUMBER: P830770

CATALOG NUMBER: OHBL-72SE-MFL-UNV-L850-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 2198.0 | 3.2 |
| 10°-20° | 6305.7 | 9.1 |
| 20°-30° | 9536.3 | 13.7 |
| 30°-40° | 11448.4 | 16.5 |
| 40°-50° | 11824.3 | 17.0 |
| 50°-60° | 10638.2 | 15.3 |
| 60°-70° | 8013.6 | 11.5 |
| 70°-80° | 4838.9 | 7.0 |
| 80°-90° | 2366.6 | 3.4 |
| 90°-100° | 996.2 | 1.4 |
| 100°-110° | 568.6 | 0.8 |
| 110°-120° | 333.8 | 0.5 |
| 120°-130° | 188.8 | 0.3 |
| 130°-140° | 99.4 | 0.1 |
| 140°-150° | 48.3 | 0.1 |
| 150°-160° | 18.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 18040.0 | 26.0 |
| 0°-40° | 29488.4 | 42.5 |
| 0°-60° | 51950.9 | 74.8 |
| 0°-90° | 67169.9 | 96.8 |
| 90°-120° | 1898.6 | 2.7 |
| 90°-150° | 2235.1 | 3.2 |
| 90°-180° | 2253.0 | 3.2 |
| 0°-180° | 69423.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|-------|
| 0° | 23196 | 23196 | 23196 | 23196 | 23196 | |
| 5° | 23049 | 23111 | 23083 | 23174 | 23145 | ### |
| 15° | 22118 | 22226 | 22328 | 22515 | 22538 | 6236 |
| 25° | 20199 | 20420 | 20710 | 21034 | 21085 | 9291 |
| 35° | 17270 | 17673 | 18399 | 18956 | 19069 | 10796 |
| 45° | 13631 | 14318 | 15515 | 16361 | 16537 | 10523 |
| 55° | 9657 | 10656 | 12274 | 13199 | 13358 | 8658 |
| 65° | 5893 | 7096 | 8686 | 9117 | 9015 | 5855 |
| 75° | 2776 | 3985 | 5030 | 5160 | 5109 | 2962 |
| 85° | 579 | 1527 | 2521 | 2867 | 2918 | 669 |
| 90° | 0 | 596 | 1442 | 1817 | 1890 | 37 |
| 95° | 28 | 403 | 1079 | 1374 | 1425 | 24 |
| 105° | 40 | 233 | 624 | 818 | 852 | 40 |
| 115° | 45 | 131 | 386 | 517 | 539 | 46 |
| 125° | 45 | 62 | 233 | 335 | 352 | 41 |
| 135° | 40 | 51 | 119 | 204 | 227 | 31 |
| 145° | 57 | 51 | 57 | 102 | 119 | 34 |
| 155° | 57 | 62 | 57 | 51 | 57 | 18 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P830770

CATALOG NUMBER: OHBL-72SE-MFL-UNV-L850-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|----------------|----------------|----------------|----------------|----------------|
| 0° | 23196.4 | 23196.4 | 23196.4 | <i>23196.4</i> | 23196.4 |
| 2.5° | <i>23128.3</i> | <i>23185.1</i> | <i>23151.0</i> | <i>23224.8</i> | <i>23219.1</i> |
| 5° | 23048.8 | 23111.3 | 23082.9 | <i>23173.7</i> | 23145.3 |
| 7.5° | 22912.6 | 22980.7 | 22975.0 | <i>23077.2</i> | 23065.9 |
| 10° | 22713.9 | 22787.7 | 22810.4 | <i>22946.6</i> | 22946.6 |
| 12.5° | 22441.4 | 22537.9 | 22594.7 | <i>22759.3</i> | 22765.0 |
| 15° | 22117.8 | 22225.7 | 22327.8 | <i>22515.2</i> | 22537.9 |
| 17.5° | 21726.1 | 21862.3 | 22004.3 | <i>22220.0</i> | 22248.4 |
| 20° | 21283.3 | 21436.5 | 21629.6 | <i>21856.6</i> | 21890.7 |
| 22.5° | 20772.3 | 20954.0 | 21203.8 | <i>21470.6</i> | 21510.3 |
| 25° | 20199.0 | 20420.4 | 20709.9 | <i>21033.5</i> | 21084.6 |
| 27.5° | 19546.1 | 19801.6 | 20193.3 | <i>20556.6</i> | 20602.0 |
| 30° | 18836.5 | 19137.3 | 19625.6 | <i>20057.0</i> | 20130.8 |
| 32.5° | 18087.1 | 18433.4 | 19035.2 | <i>19517.7</i> | 19619.9 |
| 35° | 17269.6 | 17672.7 | 18399.3 | <i>18955.7</i> | 19069.2 |
| 37.5° | 16463.5 | 16906.3 | 17729.4 | <i>18365.3</i> | 18501.5 |
| 40° | 15521.1 | 16071.7 | 17014.1 | <i>17718.1</i> | 17882.7 |
| 42.5° | 14635.4 | 15231.5 | 16298.8 | <i>17065.2</i> | 17224.2 |
| 45° | 13630.6 | 14317.5 | 15515.4 | <i>16361.3</i> | 16537.3 |
| 47.5° | 12688.2 | 13431.9 | 14760.3 | <i>15634.6</i> | 15816.3 |
| 50° | 11694.7 | 12512.2 | 13954.2 | <i>14868.2</i> | 15055.5 |
| 52.5° | 10701.2 | 11581.2 | 13119.7 | <i>14067.7</i> | 14243.7 |
| 55° | 9656.7 | 10655.8 | 12273.8 | <i>13199.1</i> | 13358.1 |
| 57.5° | 8685.9 | 9741.8 | 11405.2 | <i>12285.1</i> | 12381.6 |
| 60° | 7726.5 | 8822.1 | 10519.6 | <i>11291.7</i> | 11325.7 |
| 62.5° | 6789.8 | 7942.2 | 9611.2 | <i>10224.4</i> | 10179.0 |
| 65° | 5892.8 | 7096.3 | 8685.9 | <i>9117.3</i> | 9015.2 |
| 67.5° | 5029.9 | 6273.1 | 7737.8 | <i>8016.0</i> | 7879.7 |
| 70° | 4212.4 | 5472.7 | 6818.1 | <i>6960.1</i> | 6835.2 |
| 72.5° | 3491.4 | 4712.0 | 5887.1 | <i>6006.3</i> | 5915.5 |
| 75° | 2776.1 | 3985.3 | 5029.9 | <i>5160.4</i> | 5109.3 |
| 77.5° | 2106.2 | 3281.3 | 4240.8 | <i>4411.1</i> | 4422.4 |
| 80° | 1515.8 | 2639.8 | 3553.8 | <i>3820.7</i> | 3854.7 |
| 82.5° | 999.2 | 2049.4 | 2980.5 | <i>3321.1</i> | 3372.2 |
| 85° | 579.1 | 1527.1 | 2520.6 | <i>2866.9</i> | 2918.0 |
| 87.5° | 249.8 | 1101.3 | 2026.7 | <i>2338.9</i> | 2401.4 |
| 90° | 0.0 | 596.1 | 1442.0 | <i>1816.7</i> | 1890.5 |
| 92.5° | 17.0 | 493.9 | 1237.6 | <i>1578.2</i> | 1640.7 |
| 95° | 28.4 | 403.1 | 1078.6 | <i>1373.8</i> | 1424.9 |
| 97.5° | 34.1 | 340.6 | 936.7 | <i>1197.9</i> | 1249.0 |
| 100° | 34.1 | 295.2 | 811.8 | <i>1050.3</i> | 1095.7 |
| 102.5° | 34.1 | 261.1 | 709.6 | <i>919.7</i> | 959.4 |
| 105° | 39.7 | 232.8 | 624.5 | <i>817.5</i> | 851.6 |



TEST NUMBER: P830770

CATALOG NUMBER: OHBL-72SE-MFL-UNV-L850-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 45.4 | 153.3 | 431.5 | 579.1 | 601.8 |
| 115° | 45.4 | 130.6 | 386.0 | 516.6 | 539.3 |
| 117.5° | 51.1 | 113.5 | 340.6 | 465.5 | 482.5 |
| 120° | 51.1 | 96.5 | 300.9 | 414.4 | 437.1 |
| 122.5° | 51.1 | 79.5 | 266.8 | 374.7 | 391.7 |
| 125° | 45.4 | 62.4 | 232.8 | 334.9 | 352.0 |
| 127.5° | 39.7 | 51.1 | 198.7 | 300.9 | 317.9 |
| 130° | 39.7 | 45.4 | 170.3 | 266.8 | 283.9 |
| 132.5° | 39.7 | 51.1 | 141.9 | 232.8 | 255.5 |
| 135° | 39.7 | 51.1 | 119.2 | 204.4 | 227.1 |
| 137.5° | 39.7 | 51.1 | 96.5 | 176.0 | 198.7 |
| 140° | 45.4 | 51.1 | 79.5 | 147.6 | 170.3 |
| 142.5° | 51.1 | 51.1 | 62.4 | 124.9 | 141.9 |
| 145° | 56.8 | 51.1 | 56.8 | 102.2 | 119.2 |
| 147.5° | 56.8 | 56.8 | 56.8 | 79.5 | 96.5 |
| 150° | 56.8 | 62.4 | 56.8 | 62.4 | 79.5 |
| 152.5° | 56.8 | 62.4 | 56.8 | 51.1 | 62.4 |
| 155° | 56.8 | 62.4 | 56.8 | 51.1 | 56.8 |
| 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° | 39.7 | 204.4 | 550.7 | 726.7 | 755.0 |
| 110° | 39.7 | 181.7 | 488.2 | 647.2 | 675.6 |



(END OF REPORT)