

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: P827177

Luminaire Tested: **OHBL-30SE-MCL-UNV-L840-CD-UPL15**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827177
REPORT IS A COMBINATION OF REPORTS P826126 AND G3-2310-221-10
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-30SE-MCL-UNV-L840-CD-UPL15
Description: 30000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM CLEAR LENS AND 1500 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

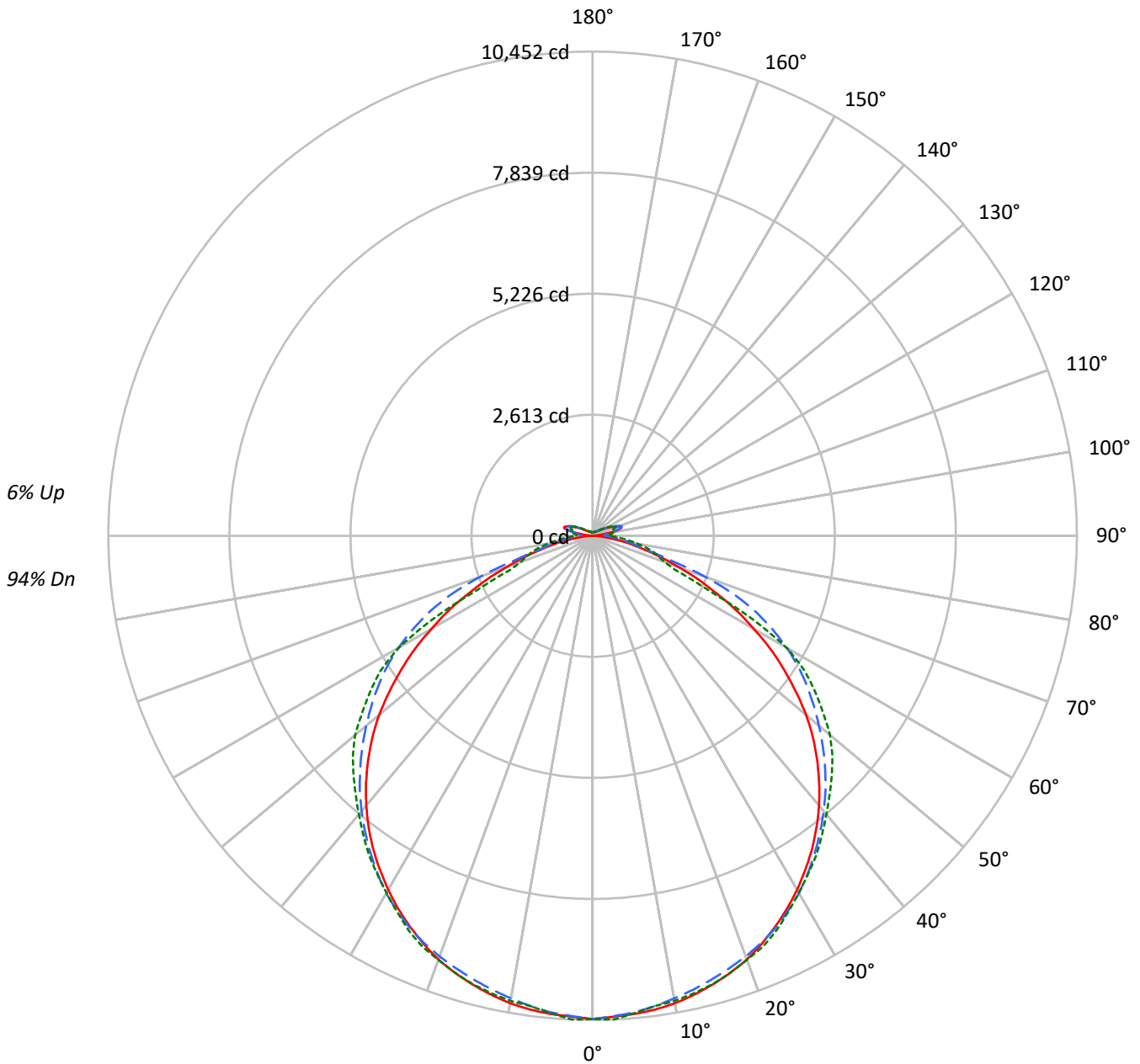
Lumens per Lamp: N/A
Luminaire Lumens: 31002.2 lumens
Efficiency: N/A
Efficacy: 168.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Direct

Input Watts (W): 184.3
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: P827177

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Luminous Intensity Polar Plot





TEST NUMBER: P827177

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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 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 97 | 97 | 97 | 94 | | | | | | | | | | | | | | | | | | | |
| 1 | 108 | 103 | 99 | 95 | 104 | 100 | 97 | 93 | 95 | 92 | 89 | 90 | 88 | 85 | 86 | 84 | 82 | 79 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 90 | 84 | 78 | 95 | 88 | 82 | 77 | 83 | 78 | 74 | 79 | 75 | 71 | 75 | 72 | 69 | 67 | | | | | | | | | | | | | | | | | | | |
| 3 | 90 | 79 | 71 | 65 | 87 | 77 | 70 | 64 | 74 | 67 | 62 | 70 | 65 | 60 | 67 | 62 | 59 | 56 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 62 | 55 | 79 | 69 | 61 | 54 | 65 | 59 | 53 | 62 | 56 | 52 | 60 | 55 | 50 | 48 | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 63 | 54 | 47 | 73 | 61 | 53 | 47 | 59 | 51 | 46 | 56 | 50 | 45 | 54 | 48 | 44 | 42 | | | | | | | | | | | | | | | | | | | |
| 6 | 70 | 56 | 48 | 41 | 67 | 55 | 47 | 41 | 53 | 46 | 40 | 51 | 44 | 39 | 49 | 43 | 39 | 36 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 51 | 43 | 36 | 62 | 50 | 42 | 36 | 48 | 41 | 35 | 46 | 40 | 35 | 44 | 39 | 34 | 32 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 47 | 38 | 32 | 58 | 46 | 38 | 32 | 44 | 37 | 32 | 42 | 36 | 31 | 41 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 43 | 35 | 29 | 54 | 42 | 34 | 29 | 40 | 33 | 28 | 39 | 33 | 28 | 37 | 32 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 32 | 26 | 51 | 39 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 25 | 35 | 29 | 25 | 23 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17816 | 17816 | 17816 |
| 5° | 17614 | 17549 | 17669 |
| 10° | 17464 | 17276 | 17547 |
| 15° | 17267 | 17069 | 17504 |
| 20° | 17069 | 16936 | 17427 |
| 25° | 16772 | 16802 | 17354 |
| 30° | 16454 | 16595 | 17112 |
| 35° | 16088 | 16271 | 17023 |
| 40° | 15636 | 15936 | 16876 |
| 45° | 15046 | 15549 | 16881 |
| 50° | 14280 | 15110 | 16883 |
| 55° | 13138 | 14675 | 16411 |
| 60° | 11686 | 14044 | 15356 |
| 65° | 9847 | 12886 | 9885 |
| 70° | 7740 | 10039 | 7323 |
| 75° | 5595 | 5942 | 7675 |
| 80° | 3663 | 4917 | 7738 |
| 85° | 1834 | 4465 | 8136 |



TEST NUMBER: P827177

CATALOG NUMBER: OHBL-30SE-MCL-UNV-L840-CD-UPL15

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 983.6 | 3.2 |
| 10°-20° | 2820.4 | 9.1 |
| 20°-30° | 4307.6 | 13.9 |
| 30°-40° | 5226.6 | 16.9 |
| 40°-50° | 5478.0 | 17.7 |
| 50°-60° | 4963.9 | 16.0 |
| 60°-70° | 3328.1 | 10.7 |
| 70°-80° | 1494.4 | 4.8 |
| 80°-90° | 546.2 | 1.8 |
| 90°-100° | 308.9 | 1.0 |
| 100°-110° | 581.6 | 1.9 |
| 110°-120° | 472.2 | 1.5 |
| 120°-130° | 229.4 | 0.7 |
| 130°-140° | 118.7 | 0.4 |
| 140°-150° | 70.2 | 0.2 |
| 150°-160° | 42.5 | 0.1 |
| 160°-170° | 23.0 | 0.1 |
| 170°-180° | 7.1 | 0.0 |
| 0°-30° | 8111.5 | 26.2 |
| 0°-40° | 13338.1 | 43.0 |
| 0°-60° | 23780.0 | 76.7 |
| 0°-90° | 29148.7 | 94.0 |
| 90°-120° | 1362.7 | 4.4 |
| 90°-150° | 1781.0 | 5.7 |
| 90°-180° | 1854.0 | 6.0 |
| 0°-180° | 31002.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 10431 | 10431 | 10431 | 10431 | 10431 | |
| 5° | 10363 | 10399 | 10327 | 10359 | 10345 | 986 |
| 15° | 10027 | 9988 | 9917 | 10004 | 10016 | 2831 |
| 25° | 9315 | 9274 | 9339 | 9425 | 9398 | 4294 |
| 35° | 8256 | 8276 | 8360 | 8449 | 8416 | 5160 |
| 45° | 6852 | 6964 | 7093 | 7274 | 7297 | 5278 |
| 55° | 5042 | 5285 | 5645 | 5872 | 5858 | 4501 |
| 65° | 2959 | 3422 | 3885 | 3279 | 2677 | 2948 |
| 75° | 1164 | 1689 | 1243 | 1272 | 1354 | 1272 |
| 85° | 201 | 385 | 493 | 596 | 624 | 245 |
| 90° | 4 | 150 | 284 | 358 | 378 | 14 |
| 95° | 30 | 152 | 282 | 355 | 384 | 102 |
| 105° | 639 | 659 | 618 | 480 | 454 | 606 |
| 115° | 448 | 454 | 484 | 494 | 488 | 451 |
| 125° | 222 | 235 | 256 | 259 | 259 | 210 |
| 135° | 139 | 144 | 149 | 158 | 161 | 110 |
| 145° | 105 | 108 | 110 | 114 | 115 | 67 |
| 155° | 88 | 91 | 93 | 93 | 92 | 41 |
| 165° | 80 | 80 | 81 | 81 | 81 | 23 |
| 175° | 74 | 74 | 72 | 72 | 72 | 7 |
| 180° | 72 | 72 | 72 | 72 | 72 | |



TEST NUMBER: P827177

CATALOG NUMBER: OHBL-30SE-MCL-UNV-L840-CD-UPL15

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 10431.1 | 10431.1 | 10431.1 | 10431.1 | 10431.1 |
| 2.5° | 10388.9 | 10432.6 | 10378.3 | 10437.1 | 10452.2 |
| 5° | 10363.2 | 10399.4 | 10327.0 | 10358.7 | 10345.1 |
| 7.5° | 10316.5 | 10328.5 | 10242.6 | 10268.2 | 10241.1 |
| 10° | 10247.1 | 10241.1 | 10140.0 | 10189.8 | 10195.8 |
| 12.5° | 10144.5 | 10126.4 | 10035.9 | 10111.4 | 10112.9 |
| 15° | 10026.9 | 9987.7 | 9916.8 | 10004.3 | 10016.3 |
| 17.5° | 9891.2 | 9839.9 | 9793.1 | 9906.2 | 9888.1 |
| 20° | 9732.8 | 9672.5 | 9663.4 | 9787.1 | 9741.8 |
| 22.5° | 9536.7 | 9490.0 | 9511.1 | 9628.7 | 9600.1 |
| 25° | 9315.0 | 9274.3 | 9339.1 | 9425.1 | 9398.0 |
| 27.5° | 9081.2 | 9057.1 | 9131.0 | 9197.4 | 9144.6 |
| 30° | 8824.8 | 8811.2 | 8909.3 | 8963.6 | 8897.2 |
| 32.5° | 8545.8 | 8550.3 | 8643.8 | 8717.7 | 8655.9 |
| 35° | 8256.2 | 8275.8 | 8360.3 | 8449.3 | 8416.1 |
| 37.5° | 7938.0 | 7981.7 | 8066.2 | 8167.2 | 8132.5 |
| 40° | 7601.6 | 7665.0 | 7758.5 | 7880.6 | 7849.0 |
| 42.5° | 7238.1 | 7318.1 | 7438.7 | 7574.5 | 7571.5 |
| 45° | 6852.0 | 6963.6 | 7093.3 | 7274.3 | 7297.0 |
| 47.5° | 6450.8 | 6576.0 | 6740.4 | 6981.7 | 7016.4 |
| 50° | 6014.9 | 6171.8 | 6376.9 | 6666.5 | 6687.6 |
| 52.5° | 5529.3 | 5743.4 | 6014.9 | 6292.5 | 6266.8 |
| 55° | 5042.1 | 5284.9 | 5645.4 | 5871.6 | 5858.1 |
| 57.5° | 4556.4 | 4829.4 | 5266.8 | 5428.2 | 5426.7 |
| 60° | 4013.5 | 4358.9 | 4837.0 | 4959.2 | 4838.5 |
| 62.5° | 3511.2 | 3882.3 | 4378.5 | 4289.5 | 3876.2 |
| 65° | 2959.2 | 3422.2 | 3885.3 | 3279.0 | 2677.2 |
| 67.5° | 2469.0 | 2951.7 | 3300.1 | 2245.8 | 1923.0 |
| 70° | 1975.8 | 2508.2 | 2573.1 | 1666.6 | 1644.0 |
| 72.5° | 1538.4 | 2105.5 | 1775.2 | 1426.8 | 1499.2 |
| 75° | 1164.4 | 1689.2 | 1242.8 | 1271.5 | 1354.4 |
| 77.5° | 849.1 | 1297.1 | 966.8 | 1114.6 | 1182.5 |
| 80° | 583.7 | 918.5 | 788.8 | 936.6 | 983.4 |
| 82.5° | 366.5 | 606.3 | 632.0 | 754.1 | 802.4 |
| 85° | 200.6 | 384.6 | 493.2 | 595.8 | 624.4 |
| 87.5° | 83.0 | 232.3 | 377.1 | 460.0 | 484.2 |
| 90° | 4.5 | 150.2 | 283.9 | 357.8 | 377.8 |
| 92.5° | 11.5 | 126.0 | 254.1 | 321.9 | 342.5 |
| 95° | 29.5 | 151.9 | 282.0 | 354.7 | 383.7 |
| 97.5° | 169.0 | 250.3 | 350.3 | 411.5 | 435.5 |
| 100° | 341.5 | 416.8 | 421.2 | 461.8 | 473.3 |
| 102.5° | 548.0 | 566.2 | 489.6 | 471.7 | 470.2 |
| 105° | 639.0 | 658.7 | 618.0 | 480.1 | 453.6 |



TEST NUMBER: P827177

CATALOG NUMBER: OHBL-30SE-MCL-UNV-L840-CD-UPL15

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 519.6 | 537.1 | 558.3 | 553.9 | 538.9 |
| 115° | 448.1 | 454.1 | 483.7 | 493.8 | 487.8 |
| 117.5° | 386.1 | 387.1 | 413.7 | 420.8 | 421.8 |
| 120° | 324.1 | 329.6 | 350.2 | 355.7 | 356.2 |
| 122.5° | 270.1 | 278.1 | 299.7 | 304.2 | 304.7 |
| 125° | 221.6 | 235.1 | 256.1 | 258.7 | 259.2 |
| 127.5° | 192.1 | 199.1 | 219.1 | 223.7 | 223.2 |
| 130° | 168.1 | 174.6 | 188.1 | 195.1 | 195.1 |
| 132.5° | 152.6 | 158.1 | 167.6 | 174.6 | 175.6 |
| 135° | 138.6 | 144.1 | 148.6 | 158.1 | 160.6 |
| 137.5° | 130.1 | 132.1 | 136.1 | 144.6 | 147.1 |
| 140° | 120.1 | 123.1 | 124.6 | 131.6 | 134.1 |
| 142.5° | 111.6 | 115.1 | 115.6 | 122.1 | 123.6 |
| 145° | 104.6 | 108.1 | 110.1 | 113.6 | 115.1 |
| 147.5° | 101.1 | 103.1 | 105.1 | 105.1 | 107.6 |
| 150° | 96.1 | 98.1 | 99.1 | 100.1 | 100.1 |
| 152.5° | 92.1 | 93.1 | 95.1 | 95.1 | 96.1 |
| 155° | 88.1 | 90.6 | 92.6 | 92.6 | 92.1 |
| 157.5° | 85.1 | 87.6 | 88.6 | 89.6 | 89.6 |
| 160° | 82.1 | 84.6 | 85.6 | 85.6 | 86.6 |
| 162.5° | 81.6 | 82.6 | 82.6 | 83.6 | 83.6 |
| 165° | 79.6 | 79.6 | 80.6 | 80.6 | 80.6 |
| 167.5° | 77.6 | 79.1 | 78.6 | 78.6 | 79.6 |
| 170° | 75.6 | 76.6 | 76.6 | 75.1 | 76.1 |
| 172.5° | 74.6 | 74.6 | 75.6 | 74.1 | 74.1 |
| 175° | 73.6 | 73.6 | 72.1 | 71.6 | 71.6 |
| 177.5° | 74.1 | 73.6 | 72.1 | 70.6 | 69.1 |
| 180° | 72.1 | 72.1 | 72.1 | 72.1 | 72.1 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 640.5 | 662.7 | 660.9 | 541.0 | 471.0 |
| 110° | 593.0 | 613.1 | 624.8 | 587.4 | 528.4 |



(END OF REPORT)