

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: P827184

Luminaire Tested: **OHBL-30SE-NL-UNV-L840-CD-UPL30**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827184
REPORT IS A COMBINATION OF REPORTS P826285 AND G3-2310-221-4
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-30SE-NL-UNV-L840-CD-UPL30
Description: 30000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS AND 3000 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

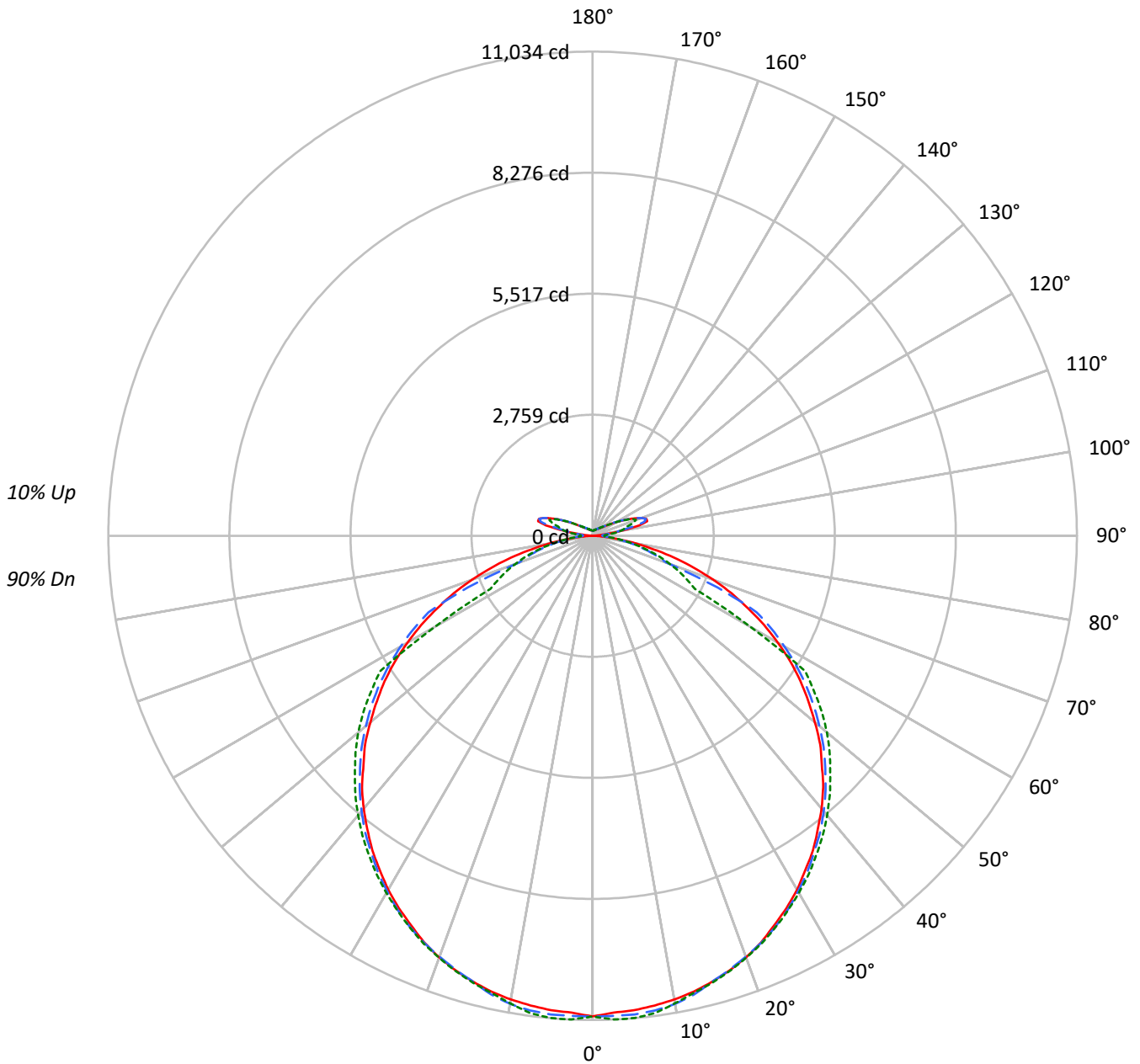
Lumens per Lamp: N/A
Luminaire Lumens: 33815.9 lumens
Efficiency: N/A
Efficacy: 171.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.1')
CIE Type: Direct

Input Watts (W): 197.2
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: P827184

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Luminous Intensity Polar Plot





TEST NUMBER: P827184

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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 | 117 | 117 | 117 | 117 | 113 | 113 | 113 | 113 | 106 | 106 | 106 | 99 | 99 | 99 | 93 | 93 | 93 | 90 | | | | | | | | | | | | | | | | | | | |
| 1 | 107 | 103 | 99 | 95 | 103 | 99 | 96 | 92 | 93 | 90 | 88 | 88 | 86 | 83 | 83 | 81 | 79 | 77 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 90 | 83 | 78 | 94 | 87 | 81 | 76 | 82 | 77 | 73 | 77 | 73 | 70 | 73 | 70 | 67 | 64 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 79 | 71 | 65 | 86 | 77 | 69 | 64 | 72 | 66 | 61 | 68 | 63 | 59 | 65 | 61 | 57 | 54 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 61 | 55 | 79 | 68 | 60 | 54 | 64 | 58 | 52 | 61 | 55 | 51 | 58 | 53 | 49 | 47 | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 62 | 54 | 47 | 72 | 61 | 53 | 47 | 58 | 51 | 45 | 55 | 49 | 44 | 52 | 47 | 43 | 40 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 41 | 67 | 55 | 47 | 41 | 52 | 45 | 40 | 49 | 43 | 38 | 47 | 42 | 37 | 35 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 51 | 42 | 36 | 62 | 50 | 42 | 36 | 47 | 40 | 35 | 45 | 39 | 34 | 43 | 37 | 33 | 31 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 46 | 38 | 32 | 57 | 45 | 37 | 32 | 43 | 36 | 31 | 41 | 35 | 30 | 39 | 34 | 30 | 28 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 42 | 34 | 29 | 54 | 41 | 34 | 29 | 40 | 33 | 28 | 38 | 32 | 27 | 36 | 31 | 27 | 25 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 50 | 38 | 31 | 26 | 37 | 30 | 25 | 35 | 29 | 25 | 34 | 28 | 24 | 22 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 18708 | 18708 | 18708 |
| 5° | 18508 | 18673 | 18871 |
| 10° | 18415 | 18587 | 18677 |
| 15° | 18313 | 18304 | 18513 |
| 20° | 18184 | 18150 | 18422 |
| 25° | 17952 | 18035 | 18337 |
| 30° | 17754 | 17834 | 18257 |
| 35° | 17514 | 17597 | 18186 |
| 40° | 17225 | 17373 | 18132 |
| 45° | 16822 | 17058 | 18019 |
| 50° | 16391 | 16704 | 17947 |
| 55° | 15867 | 16254 | 17643 |
| 60° | 15082 | 15590 | 13630 |
| 65° | 13957 | 14737 | 9078 |
| 70° | 12508 | 7577 | 8679 |
| 75° | 10384 | 6847 | 8092 |
| 80° | 7292 | 5728 | 7085 |
| 85° | 2926 | 4589 | 6131 |



TEST NUMBER: P827184

CATALOG NUMBER: OHBL-30SE-NL-UNV-L840-CD-UPL30

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1040.6 | 3.1 |
| 10°-20° | 2979.6 | 8.8 |
| 20°-30° | 4533.7 | 13.4 |
| 30°-40° | 5512.3 | 16.3 |
| 40°-50° | 5795.9 | 17.1 |
| 50°-60° | 5292.4 | 15.7 |
| 60°-70° | 3392.7 | 10.0 |
| 70°-80° | 1602.6 | 4.7 |
| 80°-90° | 450.9 | 1.3 |
| 90°-100° | 354.4 | 1.0 |
| 100°-110° | 1102.4 | 3.3 |
| 110°-120° | 890.0 | 2.6 |
| 120°-130° | 415.8 | 1.2 |
| 130°-140° | 209.6 | 0.6 |
| 140°-150° | 122.5 | 0.4 |
| 150°-160° | 71.8 | 0.2 |
| 160°-170° | 37.3 | 0.1 |
| 170°-180° | 11.4 | 0.0 |
| 0°-30° | 8553.9 | 25.3 |
| 0°-40° | 14066.2 | 41.6 |
| 0°-60° | 25154.4 | 74.4 |
| 0°-90° | 30600.7 | 90.5 |
| 90°-120° | 2346.9 | 6.9 |
| 90°-150° | 3094.8 | 9.2 |
| 90°-180° | 3215.0 | 9.5 |
| 0°-180° | 33815.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 10953 | 10953 | 10953 | 10953 | 10953 | |
| 5° | 10852 | 10894 | 10950 | 11009 | 11032 | ### |
| 15° | 10523 | 10602 | 10521 | 10536 | 10544 | 2971 |
| 25° | 9792 | 9808 | 9842 | 9858 | 9850 | 4519 |
| 35° | 8753 | 8701 | 8801 | 8908 | 8883 | 5470 |
| 45° | 7382 | 7369 | 7494 | 7671 | 7657 | 5706 |
| 55° | 5785 | 5741 | 5935 | 6133 | 6148 | 5159 |
| 65° | 3898 | 3898 | 4124 | 2366 | 2374 | 3864 |
| 75° | 1926 | 1962 | 1274 | 1342 | 1347 | 2030 |
| 85° | 252 | 319 | 398 | 431 | 407 | 372 |
| 90° | 7 | 149 | 231 | 270 | 267 | 16 |
| 95° | 63 | 171 | 267 | 348 | 361 | 209 |
| 105° | 1287 | 1308 | 1219 | 923 | 814 | 1215 |
| 115° | 892 | 895 | 900 | 898 | 869 | 891 |
| 125° | 434 | 447 | 459 | 447 | 441 | 406 |
| 135° | 255 | 260 | 266 | 271 | 271 | 201 |
| 145° | 186 | 189 | 194 | 196 | 196 | 118 |
| 155° | 149 | 152 | 154 | 156 | 156 | 70 |
| 165° | 128 | 129 | 130 | 132 | 132 | 37 |
| 175° | 116 | 117 | 117 | 118 | 118 | 11 |
| 180° | 115 | 115 | 115 | 115 | 115 | |



TEST NUMBER: P827184

CATALOG NUMBER: OHBL-30SE-NL-UNV-L840-CD-UPL30

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 10953.4 | 10953.4 | 10953.4 | 10953.4 | 10953.4 |
| 2.5° | 10876.5 | 10913.1 | 10953.4 | 11005.3 | 11034.0 |
| 5° | 10851.5 | 10893.8 | 10949.6 | 11009.2 | 11032.2 |
| 7.5° | 10797.8 | 10857.2 | 10911.1 | 10953.4 | 10966.9 |
| 10° | 10730.4 | 10801.6 | 10832.4 | 10828.5 | 10818.9 |
| 12.5° | 10640.1 | 10715.1 | 10705.6 | 10661.2 | 10669.0 |
| 15° | 10522.9 | 10601.6 | 10521.0 | 10536.3 | 10544.0 |
| 17.5° | 10384.5 | 10461.4 | 10367.2 | 10397.9 | 10399.9 |
| 20° | 10223.1 | 10280.7 | 10207.7 | 10232.7 | 10232.7 |
| 22.5° | 10029.0 | 10069.3 | 10038.6 | 10055.9 | 10059.7 |
| 25° | 9792.5 | 9807.8 | 9842.4 | 9857.9 | 9850.1 |
| 27.5° | 9565.9 | 9546.5 | 9613.9 | 9650.3 | 9631.0 |
| 30° | 9313.9 | 9283.2 | 9362.0 | 9421.6 | 9398.6 |
| 32.5° | 9025.6 | 9006.5 | 9096.8 | 9167.8 | 9154.4 |
| 35° | 8752.7 | 8700.8 | 8800.8 | 8908.4 | 8883.4 |
| 37.5° | 8429.8 | 8399.1 | 8512.4 | 8626.0 | 8612.5 |
| 40° | 8114.6 | 8062.7 | 8191.5 | 8326.0 | 8312.6 |
| 42.5° | 7776.4 | 7714.8 | 7855.2 | 8016.7 | 8001.3 |
| 45° | 7382.3 | 7368.8 | 7493.8 | 7670.6 | 7657.2 |
| 47.5° | 7032.7 | 6965.3 | 7140.1 | 7311.2 | 7326.7 |
| 50° | 6609.6 | 6584.8 | 6744.3 | 6951.9 | 6967.1 |
| 52.5° | 6196.5 | 6179.2 | 6346.3 | 6555.9 | 6582.8 |
| 55° | 5785.1 | 5740.9 | 5935.1 | 6133.1 | 6148.5 |
| 57.5° | 5345.2 | 5299.0 | 5497.0 | 5712.2 | 5744.8 |
| 60° | 4874.1 | 4829.9 | 5047.1 | 5247.1 | 4172.7 |
| 62.5° | 4403.2 | 4372.5 | 4599.4 | 3257.8 | 2625.6 |
| 65° | 3897.8 | 3897.8 | 4124.4 | 2365.9 | 2373.7 |
| 67.5° | 3425.1 | 3394.3 | 3075.3 | 2125.6 | 2125.6 |
| 70° | 2917.6 | 2929.2 | 1772.0 | 1862.5 | 1864.3 |
| 72.5° | 2408.3 | 2450.6 | 1530.0 | 1602.9 | 1606.7 |
| 75° | 1925.8 | 1962.4 | 1274.2 | 1341.6 | 1347.3 |
| 77.5° | 1414.6 | 1087.8 | 1024.3 | 1076.4 | 1078.3 |
| 80° | 993.6 | 686.2 | 784.2 | 834.1 | 828.4 |
| 82.5° | 580.3 | 480.4 | 574.6 | 611.3 | 609.2 |
| 85° | 251.7 | 319.1 | 397.8 | 430.6 | 407.4 |
| 87.5° | 80.6 | 198.0 | 247.8 | 267.2 | 265.1 |
| 90° | 7.0 | 148.6 | 230.8 | 270.4 | 266.7 |
| 92.5° | 21.0 | 135.4 | 219.8 | 273.3 | 277.1 |
| 95° | 62.7 | 170.8 | 267.0 | 348.1 | 361.1 |
| 97.5° | 351.9 | 386.3 | 390.3 | 483.5 | 526.4 |
| 100° | 690.9 | 758.6 | 600.6 | 646.0 | 653.1 |
| 102.5° | 1093.6 | 1130.9 | 898.4 | 775.5 | 747.5 |
| 105° | 1286.6 | 1308.2 | 1218.7 | 922.7 | 813.9 |



TEST NUMBER: P827184

CATALOG NUMBER: OHBL-30SE-NL-UNV-L840-CD-UPL30

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|-------|
| 112.5° | 1035.6 | 1047.5 | 1054.2 | 1035.5 | 997.8 |
| 115° | 891.6 | 895.4 | 900.1 | 898.4 | 868.8 |
| 117.5° | 744.0 | 749.0 | 751.0 | 743.0 | 735.0 |
| 120° | 626.0 | 635.0 | 633.0 | 627.0 | 619.0 |
| 122.5° | 523.0 | 538.0 | 543.0 | 532.0 | 523.0 |
| 125° | 434.0 | 447.0 | 459.0 | 447.0 | 441.0 |
| 127.5° | 368.0 | 377.0 | 386.0 | 385.0 | 380.0 |
| 130° | 317.0 | 325.0 | 335.0 | 337.0 | 336.0 |
| 132.5° | 282.0 | 289.0 | 296.0 | 299.0 | 298.0 |
| 135° | 255.0 | 260.0 | 266.0 | 271.0 | 271.0 |
| 137.5° | 231.0 | 238.0 | 243.0 | 247.0 | 247.0 |
| 140° | 214.0 | 219.0 | 224.0 | 226.0 | 227.0 |
| 142.5° | 199.0 | 203.0 | 208.0 | 210.0 | 211.0 |
| 145° | 186.0 | 189.0 | 194.0 | 196.0 | 196.0 |
| 147.5° | 174.0 | 178.0 | 182.0 | 184.0 | 184.0 |
| 150° | 165.0 | 168.0 | 172.0 | 173.0 | 174.0 |
| 152.5° | 157.0 | 159.0 | 162.0 | 164.0 | 164.0 |
| 155° | 149.0 | 152.0 | 154.0 | 156.0 | 156.0 |
| 157.5° | 143.0 | 145.0 | 147.0 | 148.0 | 149.0 |
| 160° | 138.0 | 139.0 | 141.0 | 142.0 | 143.0 |
| 162.5° | 132.0 | 134.0 | 135.0 | 136.0 | 137.0 |
| 165° | 128.0 | 129.0 | 130.0 | 132.0 | 132.0 |
| 167.5° | 124.0 | 125.0 | 126.0 | 127.0 | 127.0 |
| 170° | 121.0 | 122.0 | 123.0 | 123.0 | 123.0 |
| 172.5° | 118.0 | 119.0 | 120.0 | 120.0 | 120.0 |
| 175° | 116.0 | 117.0 | 117.0 | 118.0 | 118.0 |
| 177.5° | 115.0 | 116.0 | 116.0 | 116.0 | 117.0 |
| 180° | 115.0 | 115.0 | 115.0 | 115.0 | 115.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|--------|--------|--------|--------|--------|
| 107.5° | 1285.6 | 1313.1 | 1273.9 | 1109.3 | 957.7 |
| 110° | 1181.6 | 1208.3 | 1189.0 | 1130.5 | 1046.8 |



(END OF REPORT)