

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: P826456

Luminaire Tested: **OHBL-12SE-A-UNV-L830-CD-UPL18**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P826456
REPORT IS A COMBINATION OF REPORTS P826149 AND G3-2310-221-8
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-12SE-A-UNV-L830-CD-UPL18
Description:
Light Source: -
Ballast/Driver: -

Summary

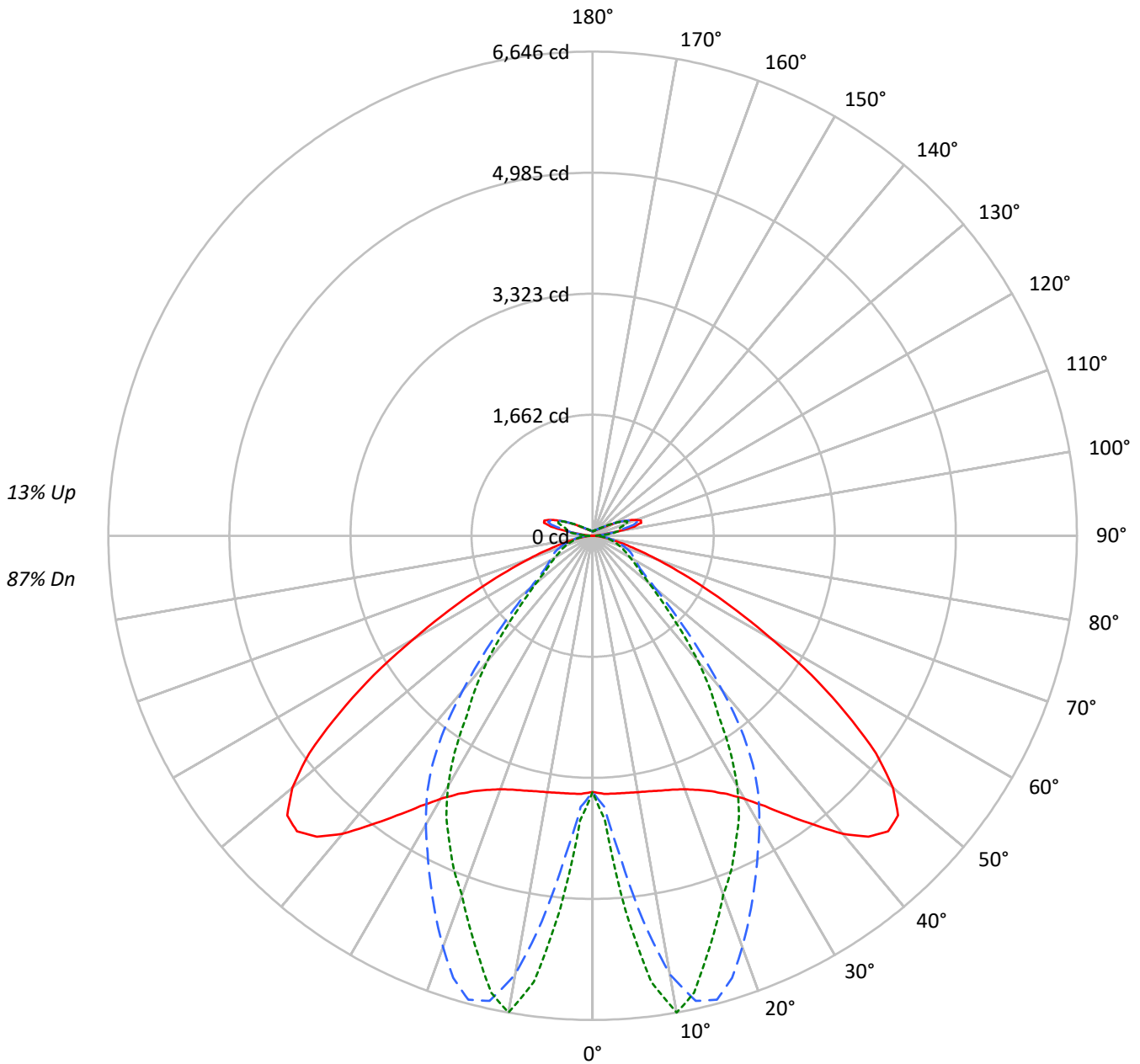
Lumens per Lamp: N/A
Luminaire Lumens: 12950.4 lumens
Efficiency: N/A
Efficacy: 157.4 lumens/watt
Spacing Criteria (0/90/45): 2.18 / 1.37 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 0.88' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 82.3
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: P826456

CATALOG NUMBER: OHBL-12SE-A-UNV-L830-CD-UPL18

Luminous Intensity Polar Plot





TEST NUMBER: P826456

CATALOG NUMBER: OHBL-12SE-A-UNV-L830-CD-UPL18

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 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 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 104 | 104 | 104 | 97 | 97 | 97 | 90 | 90 | 90 | 87 | | | | 87 |
| 1 | 108 | 104 | 100 | 97 | 104 | 100 | 97 | 94 | 94 | 91 | 89 | 88 | 86 | 84 | 82 | 81 | 79 | 76 | | | | 76 |
| 2 | 99 | 92 | 87 | 82 | 96 | 89 | 84 | 80 | 84 | 80 | 76 | 79 | 76 | 73 | 74 | 72 | 69 | 67 | | | | 67 |
| 3 | 92 | 83 | 76 | 70 | 88 | 80 | 74 | 69 | 76 | 70 | 66 | 71 | 67 | 63 | 67 | 64 | 61 | 58 | | | | 58 |
| 4 | 85 | 75 | 67 | 61 | 82 | 72 | 65 | 60 | 68 | 63 | 58 | 65 | 60 | 56 | 61 | 57 | 54 | 52 | | | | 52 |
| 5 | 79 | 68 | 60 | 54 | 76 | 66 | 58 | 53 | 62 | 56 | 51 | 59 | 54 | 50 | 56 | 52 | 48 | 46 | | | | 46 |
| 6 | 73 | 61 | 54 | 48 | 71 | 60 | 53 | 47 | 57 | 51 | 46 | 54 | 49 | 44 | 51 | 47 | 43 | 41 | | | | 41 |
| 7 | 68 | 56 | 48 | 43 | 66 | 55 | 48 | 42 | 52 | 46 | 41 | 50 | 44 | 40 | 47 | 43 | 39 | 37 | | | | 37 |
| 8 | 64 | 52 | 44 | 39 | 62 | 50 | 43 | 38 | 48 | 42 | 37 | 46 | 40 | 36 | 44 | 39 | 35 | 34 | | | | 34 |
| 9 | 60 | 48 | 40 | 35 | 58 | 47 | 40 | 35 | 45 | 38 | 34 | 43 | 37 | 33 | 41 | 36 | 32 | 31 | | | | 31 |
| 10 | 56 | 44 | 37 | 32 | 54 | 43 | 36 | 32 | 41 | 35 | 31 | 40 | 34 | 30 | 38 | 33 | 30 | 28 | | | | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11441 | 11441 | 11441 |
| 5° | 11409 | 14310 | 16771 |
| 10° | 11422 | 19621 | 21784 |
| 15° | 11604 | 21256 | 19994 |
| 20° | 11988 | 19611 | 17869 |
| 25° | 12757 | 17534 | 16344 |
| 30° | 14102 | 15690 | 14533 |
| 35° | 16425 | 13642 | 11581 |
| 40° | 19549 | 10313 | 9217 |
| 45° | 22171 | 6969 | 6560 |
| 50° | 22188 | 4736 | 4852 |
| 55° | 18917 | 3686 | 3964 |
| 60° | 13875 | 3404 | 3567 |
| 65° | 9296 | 3359 | 3378 |
| 70° | 5768 | 3169 | 3272 |
| 75° | 3326 | 2844 | 3130 |
| 80° | 1838 | 2383 | 3230 |
| 85° | 792 | 1882 | 2993 |



TEST NUMBER: P826456

CATALOG NUMBER: OHBL-12SE-A-UNV-L830-CD-UPL18

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 459.1 | 3.5 |
| 10°-20° | 1620.4 | 12.5 |
| 20°-30° | 2387.7 | 18.4 |
| 30°-40° | 2509.2 | 19.4 |
| 40°-50° | 1920.0 | 14.8 |
| 50°-60° | 1159.3 | 9.0 |
| 60°-70° | 707.5 | 5.5 |
| 70°-80° | 386.1 | 3.0 |
| 80°-90° | 139.7 | 1.1 |
| 90°-100° | 159.3 | 1.2 |
| 100°-110° | 553.3 | 4.3 |
| 110°-120° | 475.4 | 3.7 |
| 120°-130° | 228.3 | 1.8 |
| 130°-140° | 114.0 | 0.9 |
| 140°-150° | 66.2 | 0.5 |
| 150°-160° | 38.6 | 0.3 |
| 160°-170° | 20.0 | 0.2 |
| 170°-180° | 6.1 | 0.0 |
| 0°-30° | 4467.2 | 34.5 |
| 0°-40° | 6976.4 | 53.9 |
| 0°-60° | 10055.7 | 77.6 |
| 0°-90° | 11289.0 | 87.2 |
| 90°-120° | 1188.1 | 9.2 |
| 90°-150° | 1596.6 | 12.3 |
| 90°-180° | 1661.0 | 12.8 |
| 0°-180° | 12950.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3517 | 3517 | 3517 | 3517 | 3517 | |
| 5° | 3552 | 3811 | 4445 | 4964 | 5155 | 340 |
| 15° | 3621 | 5640 | 6592 | 6151 | 6006 | 1030 |
| 25° | 3870 | 6546 | 5262 | 4764 | 4647 | 1808 |
| 35° | 4687 | 5242 | 3834 | 3193 | 3006 | 2973 |
| 45° | 5737 | 2991 | 1766 | 1554 | 1489 | 4335 |
| 55° | 4243 | 1014 | 804 | 745 | 743 | 3749 |
| 65° | 1701 | 642 | 592 | 506 | 480 | 1743 |
| 75° | 453 | 399 | 366 | 302 | 290 | 521 |
| 85° | 67 | 124 | 146 | 133 | 121 | 83 |
| 90° | 4 | 23 | 32 | 42 | 46 | 6 |
| 95° | 35 | 76 | 120 | 155 | 178 | 111 |
| 105° | 690 | 683 | 582 | 410 | 379 | 654 |
| 115° | 477 | 483 | 482 | 476 | 476 | 482 |
| 125° | 233 | 244 | 250 | 249 | 248 | 219 |
| 135° | 138 | 140 | 145 | 147 | 148 | 109 |
| 145° | 100 | 102 | 105 | 106 | 106 | 64 |
| 155° | 80 | 82 | 83 | 84 | 84 | 38 |
| 165° | 69 | 70 | 70 | 71 | 71 | 20 |
| 175° | 62 | 62 | 63 | 63 | 63 | 6 |
| 180° | 62 | 62 | 62 | 62 | 62 | |



TEST NUMBER: P826456

CATALOG NUMBER: OHBL-12SE-A-UNV-L830-CD-UPL18

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3516.7 | 3516.7 | 3516.7 | 3516.7 | 3516.7 |
| 2.5° | 3545.5 | 3581.6 | 3724.4 | 3872.4 | 3908.4 |
| 5° | 3551.9 | 3810.7 | 4445.4 | 4963.8 | 5155.3 |
| 7.5° | 3559.5 | 4181.8 | 5339.0 | 5973.5 | 6176.7 |
| 10° | 3573.8 | 4651.1 | 6113.2 | 6568.7 | 6645.5 |
| 12.5° | 3591.6 | 5148.3 | 6539.2 | 6522.5 | 6425.8 |
| 15° | 3621.2 | 5640.1 | 6591.6 | 6151.0 | 6006.4 |
| 17.5° | 3652.2 | 6056.1 | 6362.8 | 5746.6 | 5620.6 |
| 20° | 3702.8 | 6365.0 | 6006.6 | 5387.1 | 5244.0 |
| 22.5° | 3775.5 | 6534.8 | 5633.3 | 5061.9 | 4968.6 |
| 25° | 3869.5 | 6545.8 | 5262.5 | 4764.4 | 4646.7 |
| 27.5° | 3995.4 | 6393.9 | 4907.0 | 4472.9 | 4348.7 |
| 30° | 4166.7 | 6103.2 | 4576.8 | 4121.3 | 3967.2 |
| 32.5° | 4399.5 | 5684.8 | 4236.3 | 3697.0 | 3524.2 |
| 35° | 4687.2 | 5242.0 | 3833.8 | 3192.7 | 3006.1 |
| 37.5° | 5001.2 | 4750.4 | 3345.3 | 2746.3 | 2637.5 |
| 40° | 5339.0 | 4243.8 | 2766.4 | 2328.3 | 2250.5 |
| 42.5° | 5602.5 | 3693.1 | 2228.7 | 1934.9 | 1852.1 |
| 45° | 5736.9 | 2991.1 | 1766.0 | 1554.0 | 1488.7 |
| 47.5° | 5684.6 | 2321.8 | 1400.0 | 1234.8 | 1215.1 |
| 50° | 5379.2 | 1714.5 | 1120.8 | 1017.2 | 1009.0 |
| 52.5° | 4901.8 | 1277.8 | 925.8 | 861.7 | 847.6 |
| 55° | 4242.6 | 1014.3 | 803.9 | 745.1 | 742.9 |
| 57.5° | 3562.1 | 861.7 | 729.7 | 684.1 | 668.3 |
| 60° | 2836.1 | 768.4 | 673.4 | 622.1 | 590.0 |
| 62.5° | 2223.1 | 703.0 | 632.1 | 562.3 | 532.4 |
| 65° | 1700.9 | 642.1 | 591.5 | 506.1 | 480.3 |
| 67.5° | 1268.0 | 584.0 | 541.7 | 446.9 | 431.9 |
| 70° | 923.8 | 524.5 | 485.0 | 397.5 | 385.6 |
| 72.5° | 658.4 | 465.1 | 428.2 | 351.1 | 338.0 |
| 75° | 452.8 | 399.3 | 366.3 | 302.2 | 290.0 |
| 77.5° | 305.5 | 332.2 | 305.2 | 258.0 | 252.9 |
| 80° | 204.1 | 263.4 | 246.9 | 218.7 | 215.5 |
| 82.5° | 123.8 | 191.2 | 194.9 | 177.8 | 169.2 |
| 85° | 67.4 | 123.8 | 146.0 | 133.0 | 120.6 |
| 87.5° | 26.4 | 68.6 | 100.6 | 90.4 | 85.1 |
| 90° | 3.7 | 23.3 | 31.6 | 41.9 | 46.5 |
| 92.5° | 12.1 | 30.7 | 51.2 | 70.7 | 78.2 |
| 95° | 35.4 | 76.3 | 120.0 | 155.4 | 177.7 |
| 97.5° | 181.5 | 198.2 | 221.5 | 262.4 | 277.3 |
| 100° | 374.1 | 392.7 | 329.4 | 345.2 | 350.8 |
| 102.5° | 585.3 | 584.4 | 422.5 | 381.5 | 375.9 |
| 105° | 689.5 | 683.0 | 582.5 | 410.4 | 378.7 |



TEST NUMBER: P826456

CATALOG NUMBER: OHBL-12SE-A-UNV-L830-CD-UPL18

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 560.2 | 563.9 | 552.8 | 537.9 | 514.6 |
| 115° | 477.4 | 483.0 | 482.0 | 476.4 | 475.5 |
| 117.5° | 406.7 | 409.4 | 411.3 | 409.4 | 410.4 |
| 120° | 339.7 | 346.2 | 349.9 | 347.1 | 345.2 |
| 122.5° | 283.8 | 292.2 | 296.8 | 294.1 | 292.2 |
| 125° | 232.6 | 243.8 | 250.3 | 249.4 | 247.5 |
| 127.5° | 197.3 | 205.7 | 214.0 | 213.1 | 211.2 |
| 130° | 171.2 | 177.7 | 183.3 | 184.2 | 185.2 |
| 132.5° | 153.5 | 156.3 | 161.9 | 162.8 | 164.7 |
| 135° | 137.7 | 140.5 | 145.2 | 147.0 | 148.0 |
| 137.5° | 125.6 | 128.4 | 132.1 | 134.0 | 134.9 |
| 140° | 115.4 | 118.2 | 121.0 | 122.8 | 123.8 |
| 142.5° | 107.0 | 109.8 | 112.6 | 113.5 | 114.5 |
| 145° | 100.5 | 102.4 | 105.2 | 106.1 | 106.1 |
| 147.5° | 94.0 | 95.8 | 97.7 | 99.6 | 99.6 |
| 150° | 88.4 | 90.3 | 92.1 | 93.1 | 94.0 |
| 152.5° | 84.7 | 85.6 | 87.5 | 88.4 | 88.4 |
| 155° | 80.0 | 81.9 | 82.8 | 83.8 | 83.8 |
| 157.5° | 77.2 | 78.2 | 79.1 | 80.0 | 80.0 |
| 160° | 74.4 | 74.4 | 75.4 | 76.3 | 76.3 |
| 162.5° | 71.7 | 71.7 | 72.6 | 73.5 | 73.5 |
| 165° | 68.9 | 69.8 | 69.8 | 70.7 | 70.7 |
| 167.5° | 67.0 | 67.0 | 67.9 | 67.9 | 68.9 |
| 170° | 65.1 | 65.1 | 66.1 | 66.1 | 66.1 |
| 172.5° | 63.3 | 64.2 | 64.2 | 64.2 | 64.2 |
| 175° | 62.3 | 62.3 | 63.3 | 63.3 | 63.3 |
| 177.5° | 61.4 | 62.3 | 62.3 | 62.3 | 62.3 |
| 180° | 62.3 | 62.3 | 62.3 | 62.3 | 62.3 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 696.1 | 696.1 | 642.1 | 498.8 | 417.8 |
| 110° | 637.4 | 644.9 | 617.0 | 561.1 | 496.9 |



(END OF REPORT)