

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: P826543

Luminaire Tested: **OHBL-24HE-W-UNV-L830-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P826543
REPORT IS A COMBINATION OF REPORTS P826244 AND G3-2310-221-6
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-24HE-W-UNV-L830-CD-UPL24
Description:
Light Source: -
Ballast/Driver: -

Summary

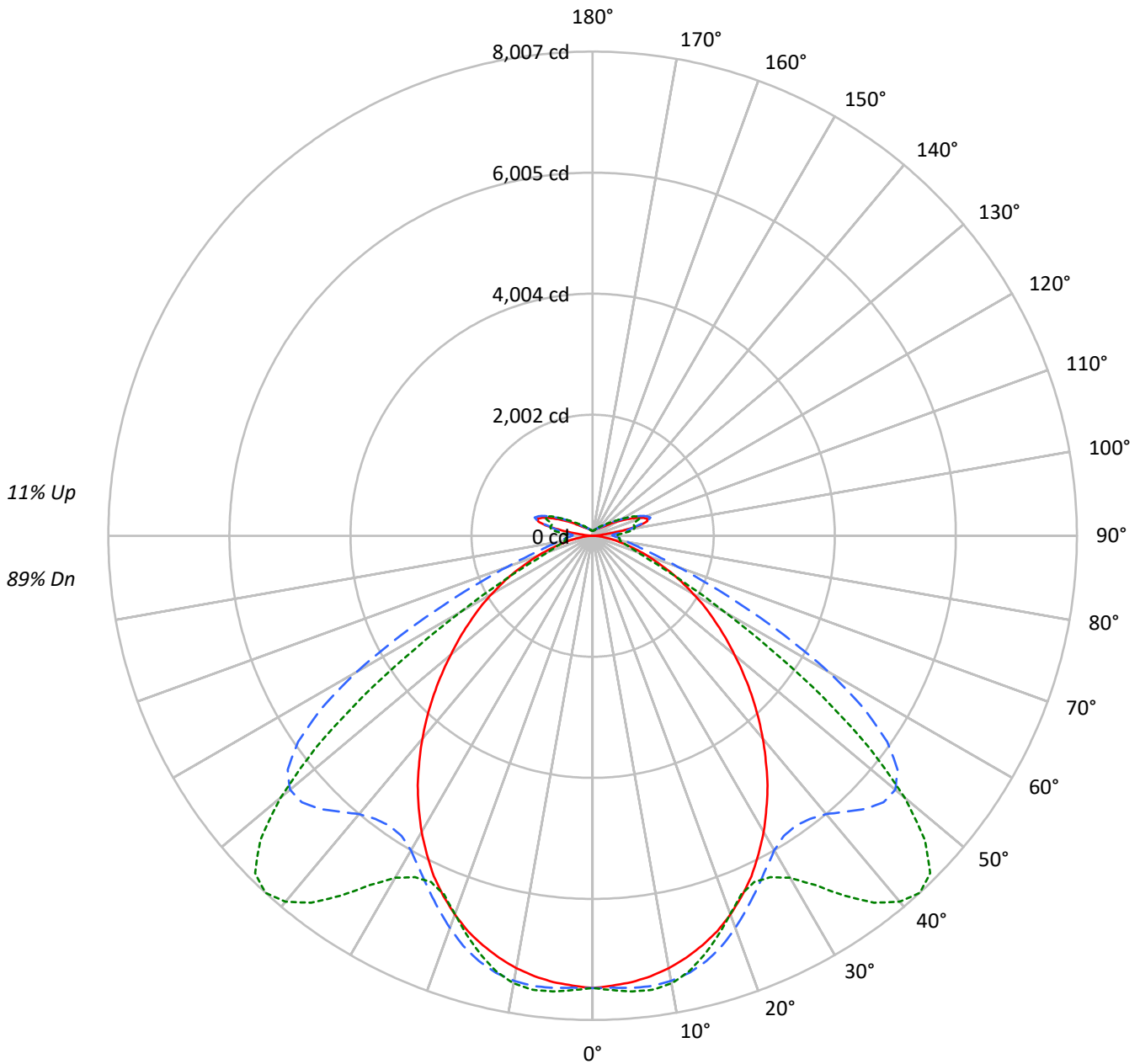
Lumens per Lamp: N/A
Luminaire Lumens: 24646.0 lumens
Efficiency: N/A
Efficacy: 163.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 150.4
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: P826543

CATALOG NUMBER: OHBL-24HE-W-UNV-L830-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P826543

CATALOG NUMBER: OHBL-24HE-W-UNV-L830-CD-UPL24

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 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 92 | 92 | 92 | 89 | | | | | | | | | | | | | | | | | | | |
| 1 | 107 | 102 | 98 | 94 | 103 | 99 | 95 | 92 | 93 | 90 | 87 | 87 | 84 | 82 | 82 | 80 | 78 | 75 | | | | | | | | | | | | | | | | | | | |
| 2 | 97 | 89 | 83 | 77 | 94 | 87 | 81 | 76 | 81 | 76 | 72 | 76 | 72 | 69 | 72 | 69 | 66 | 63 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 79 | 71 | 64 | 85 | 76 | 69 | 63 | 72 | 66 | 61 | 67 | 62 | 58 | 64 | 59 | 56 | 53 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 70 | 61 | 55 | 78 | 67 | 60 | 54 | 64 | 57 | 52 | 60 | 54 | 50 | 57 | 52 | 48 | 46 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 62 | 53 | 47 | 72 | 60 | 52 | 46 | 57 | 50 | 44 | 54 | 48 | 43 | 51 | 46 | 42 | 39 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 41 | 66 | 54 | 46 | 40 | 51 | 44 | 39 | 48 | 42 | 38 | 46 | 41 | 36 | 34 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 35 | 46 | 39 | 34 | 44 | 38 | 33 | 42 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 46 | 37 | 31 | 57 | 44 | 37 | 31 | 42 | 35 | 30 | 40 | 34 | 29 | 38 | 33 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 42 | 34 | 28 | 53 | 41 | 33 | 28 | 39 | 32 | 27 | 37 | 31 | 26 | 35 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 10 | 51 | 38 | 31 | 25 | 50 | 37 | 30 | 25 | 36 | 29 | 24 | 34 | 28 | 24 | 32 | 27 | 23 | 21 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11828 | 11828 | 11828 |
| 5° | 11668 | 11817 | 11963 |
| 10° | 11473 | 11804 | 11977 |
| 15° | 11201 | 11614 | 11593 |
| 20° | 10847 | 11220 | 11025 |
| 25° | 10392 | 10742 | 10804 |
| 30° | 9804 | 10388 | 11626 |
| 35° | 9143 | 10586 | 13605 |
| 40° | 8386 | 11472 | 15728 |
| 45° | 7600 | 13022 | 16906 |
| 50° | 6786 | 14411 | 15732 |
| 55° | 6020 | 14406 | 12021 |
| 60° | 5243 | 12202 | 7350 |
| 65° | 4428 | 8438 | 4452 |
| 70° | 3521 | 5465 | 3214 |
| 75° | 2594 | 3927 | 2980 |
| 80° | 1763 | 3464 | 3362 |
| 85° | 1067 | 3840 | 5315 |



TEST NUMBER: P826543

CATALOG NUMBER: OHBL-24HE-W-UNV-L830-CD-UPL24

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 714.7 | 2.9 |
| 10°-20° | 2023.9 | 8.2 |
| 20°-30° | 2961.6 | 12.0 |
| 30°-40° | 3846.2 | 15.6 |
| 40°-50° | 4696.7 | 19.1 |
| 50°-60° | 4136.2 | 16.8 |
| 60°-70° | 2155.4 | 8.7 |
| 70°-80° | 924.3 | 3.8 |
| 80°-90° | 449.6 | 1.8 |
| 90°-100° | 424.3 | 1.7 |
| 100°-110° | 878.6 | 3.6 |
| 110°-120° | 719.1 | 2.9 |
| 120°-130° | 349.9 | 1.4 |
| 130°-140° | 175.1 | 0.7 |
| 140°-150° | 99.4 | 0.4 |
| 150°-160° | 55.6 | 0.2 |
| 160°-170° | 27.0 | 0.1 |
| 170°-180° | 8.2 | 0.0 |
| 0°-30° | 5700.2 | 23.1 |
| 0°-40° | 9546.4 | 38.7 |
| 0°-60° | 18379.3 | 74.6 |
| 0°-90° | 21908.6 | 88.9 |
| 90°-120° | 2022.1 | 8.2 |
| 90°-150° | 2646.5 | 10.7 |
| 90°-180° | 2737.0 | 11.1 |
| 0°-180° | 24646.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 7479 | 7479 | 7479 | 7479 | 7479 | |
| 5° | 7410 | 7466 | 7506 | 7573 | 7565 | 703 |
| 15° | 7011 | 7208 | 7277 | 7223 | 7164 | 1974 |
| 25° | 6212 | 6545 | 6434 | 6312 | 6319 | 2851 |
| 35° | 5043 | 5575 | 5854 | 6827 | 7264 | 3143 |
| 45° | 3713 | 4671 | 6385 | 7731 | 7892 | 2863 |
| 55° | 2472 | 4092 | 5946 | 5214 | 4634 | 2219 |
| 65° | 1418 | 2835 | 2722 | 1514 | 1302 | 1403 |
| 75° | 571 | 1326 | 874 | 599 | 568 | 623 |
| 85° | 121 | 473 | 445 | 436 | 440 | 135 |
| 90° | 6 | 203 | 337 | 393 | 408 | 12 |
| 95° | 53 | 203 | 394 | 486 | 522 | 156 |
| 105° | 940 | 980 | 937 | 742 | 699 | 892 |
| 115° | 654 | 683 | 744 | 763 | 761 | 659 |
| 125° | 326 | 347 | 393 | 408 | 407 | 305 |
| 135° | 196 | 200 | 222 | 242 | 245 | 155 |
| 145° | 148 | 148 | 153 | 163 | 168 | 93 |
| 155° | 121 | 123 | 121 | 122 | 122 | 55 |
| 165° | 93 | 94 | 95 | 95 | 95 | 27 |
| 175° | 84 | 85 | 85 | 86 | 86 | 8 |
| 180° | 84 | 84 | 84 | 84 | 84 | |



TEST NUMBER: P826543

CATALOG NUMBER: OHBL-24HE-W-UNV-L830-CD-UPL24

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 7479.2 | 7479.2 | 7479.2 | 7479.2 | 7479.2 |
| 2.5° | 7446.9 | 7479.2 | 7480.7 | 7526.0 | 7521.1 |
| 5° | 7409.7 | 7466.2 | 7506.5 | 7572.7 | 7564.7 |
| 7.5° | 7348.4 | 7437.2 | 7508.2 | 7580.8 | 7574.4 |
| 10° | 7261.3 | 7382.3 | 7475.9 | 7535.6 | 7516.3 |
| 12.5° | 7148.3 | 7308.1 | 7400.1 | 7413.0 | 7375.9 |
| 15° | 7011.2 | 7208.1 | 7277.4 | 7222.6 | 7164.4 |
| 17.5° | 6856.2 | 7087.0 | 7111.2 | 6991.8 | 6919.2 |
| 20° | 6662.6 | 6925.7 | 6901.5 | 6736.8 | 6656.2 |
| 22.5° | 6448.0 | 6748.2 | 6670.7 | 6498.1 | 6420.6 |
| 25° | 6212.5 | 6544.9 | 6433.5 | 6312.5 | 6318.9 |
| 27.5° | 5936.5 | 6314.1 | 6206.0 | 6260.9 | 6364.1 |
| 30° | 5655.7 | 6072.1 | 6005.9 | 6325.4 | 6528.7 |
| 32.5° | 5347.5 | 5823.5 | 5883.3 | 6514.2 | 6846.6 |
| 35° | 5042.6 | 5575.1 | 5854.2 | 6827.2 | 7264.5 |
| 37.5° | 4705.4 | 5323.3 | 5901.0 | 7188.6 | 7646.9 |
| 40° | 4377.7 | 5078.0 | 6007.5 | 7513.0 | 7900.3 |
| 42.5° | 4043.7 | 4858.6 | 6186.6 | 7705.0 | 8006.8 |
| 45° | 3712.9 | 4671.4 | 6385.1 | 7730.9 | 7892.2 |
| 47.5° | 3382.1 | 4513.3 | 6522.3 | 7526.0 | 7451.7 |
| 50° | 3062.6 | 4372.9 | 6531.9 | 7033.8 | 6730.4 |
| 52.5° | 2764.1 | 4243.8 | 6354.4 | 6249.5 | 5778.4 |
| 55° | 2472.0 | 4092.1 | 5946.2 | 5213.6 | 4634.4 |
| 57.5° | 2205.8 | 3882.4 | 5316.9 | 4100.2 | 3467.6 |
| 60° | 1923.5 | 3598.4 | 4503.6 | 2999.7 | 2501.1 |
| 62.5° | 1663.6 | 3245.0 | 3591.9 | 2088.0 | 1797.6 |
| 65° | 1418.4 | 2835.1 | 2722.2 | 1513.5 | 1302.2 |
| 67.5° | 1158.5 | 2410.8 | 2009.0 | 1103.7 | 968.2 |
| 70° | 955.3 | 2017.0 | 1495.9 | 858.4 | 779.3 |
| 72.5° | 747.1 | 1642.7 | 1118.2 | 697.1 | 653.5 |
| 75° | 571.2 | 1326.4 | 874.5 | 598.6 | 568.0 |
| 77.5° | 421.2 | 1048.8 | 703.5 | 529.3 | 500.3 |
| 80° | 295.3 | 826.1 | 588.9 | 472.8 | 461.5 |
| 82.5° | 198.5 | 639.0 | 501.8 | 450.2 | 451.8 |
| 85° | 121.1 | 472.8 | 445.4 | 435.7 | 440.5 |
| 87.5° | 58.1 | 335.7 | 382.5 | 397.0 | 401.8 |
| 90° | 6.2 | 202.7 | 337.4 | 393.3 | 408.0 |
| 92.5° | 15.8 | 172.6 | 325.1 | 395.0 | 415.2 |
| 95° | 52.6 | 203.3 | 394.0 | 486.5 | 522.5 |
| 97.5° | 253.6 | 353.1 | 501.0 | 604.4 | 639.9 |
| 100° | 518.5 | 616.3 | 627.3 | 692.8 | 706.0 |
| 102.5° | 798.6 | 852.0 | 742.9 | 718.9 | 714.7 |
| 105° | 939.8 | 979.6 | 937.1 | 741.6 | 699.2 |



TEST NUMBER: P826543

CATALOG NUMBER: OHBL-24HE-W-UNV-L830-CD-UPL24

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 761.6 | 801.8 | 854.6 | 855.8 | 829.3 |
| 115° | 653.6 | 682.7 | 744.1 | 763.1 | 760.8 |
| 117.5° | 562.1 | 580.9 | 637.8 | 656.2 | 658.8 |
| 120° | 467.2 | 490.4 | 545.6 | 560.3 | 556.3 |
| 122.5° | 393.7 | 413.0 | 462.1 | 478.0 | 474.0 |
| 125° | 325.8 | 347.4 | 392.7 | 407.9 | 406.7 |
| 127.5° | 275.8 | 289.5 | 334.3 | 351.4 | 352.1 |
| 130° | 241.4 | 248.8 | 287.2 | 304.3 | 308.4 |
| 132.5° | 215.3 | 221.8 | 251.0 | 270.8 | 273.1 |
| 135° | 195.8 | 199.5 | 222.1 | 241.8 | 245.3 |
| 137.5° | 180.0 | 182.8 | 199.6 | 218.6 | 221.8 |
| 140° | 166.0 | 169.7 | 180.8 | 198.9 | 201.4 |
| 142.5° | 155.5 | 157.6 | 166.2 | 181.0 | 182.6 |
| 145° | 147.9 | 148.3 | 152.7 | 163.3 | 167.5 |
| 147.5° | 139.5 | 141.5 | 143.4 | 151.8 | 153.4 |
| 150° | 133.0 | 134.8 | 134.4 | 138.6 | 142.7 |
| 152.5° | 126.5 | 128.3 | 127.9 | 128.8 | 132.0 |
| 155° | 120.9 | 122.7 | 121.3 | 122.3 | 122.3 |
| 157.5° | 103.3 | 105.2 | 107.0 | 107.9 | 107.9 |
| 160° | 99.6 | 100.5 | 102.4 | 103.3 | 103.3 |
| 162.5° | 95.8 | 96.8 | 97.7 | 98.6 | 98.6 |
| 165° | 93.1 | 94.0 | 94.9 | 94.9 | 94.9 |
| 167.5° | 90.3 | 90.3 | 91.2 | 92.1 | 92.1 |
| 170° | 87.5 | 88.4 | 88.4 | 89.3 | 89.3 |
| 172.5° | 85.6 | 86.5 | 86.5 | 86.5 | 87.5 |
| 175° | 83.8 | 84.7 | 84.7 | 85.6 | 85.6 |
| 177.5° | 83.8 | 83.8 | 83.8 | 83.8 | 83.8 |
| 180° | 83.8 | 83.8 | 83.8 | 83.8 | 83.8 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|--------|-------|-------|
| 107.5° | 945.2 | 990.9 | 1003.8 | 841.3 | 731.0 |
| 110° | 872.6 | 916.4 | 950.4 | 904.6 | 816.6 |



(END OF REPORT)