

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: P828662

Luminaire Tested: **OHBL-24SE-W-UNV-L950-CD-UPL36**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P828662
REPORT IS A COMBINATION OF REPORTS P826310 AND G3-2310-221-2
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-24SE-W-UNV-L950-CD-UPL36
Description:
Light Source: -
Ballast/Driver: -

Summary

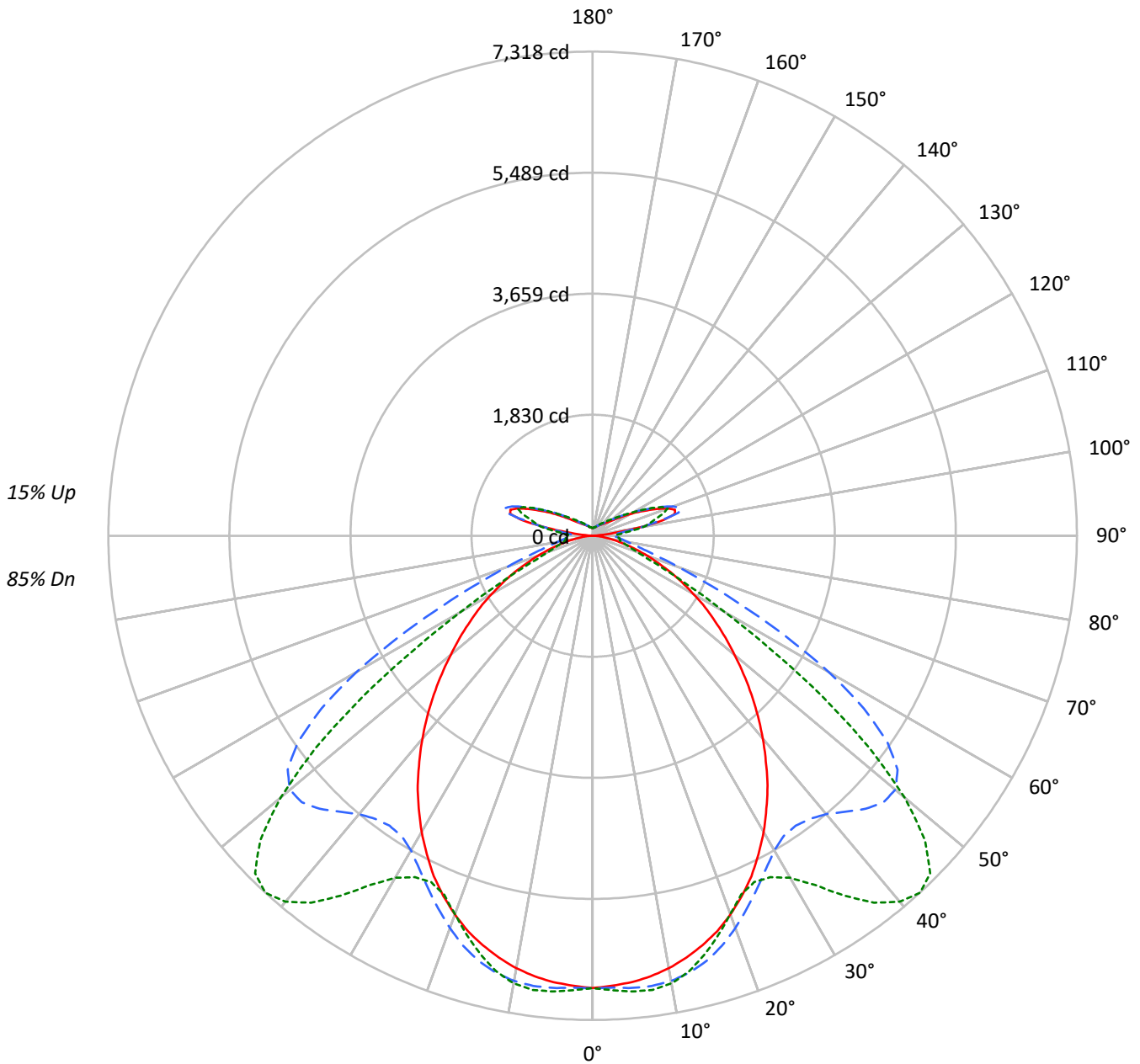
Lumens per Lamp: N/A
Luminaire Lumens: 23582.0 lumens
Efficiency: N/A
Efficacy: 141.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 166.8
Input Voltage (V): NR
Input Current (Ain): 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: P828662

CATALOG NUMBER: OHBL-24SE-W-UNV-L950-CD-UPL36

Luminous Intensity Polar Plot





TEST NUMBER: P828662

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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 | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 103 | 103 | 103 | 95 | 95 | 95 | 88 | 88 | 88 | 85 | | | | |
| 1 | 106 | 101 | 97 | 94 | 102 | 98 | 94 | 91 | 91 | 88 | 85 | 84 | 82 | 80 | 78 | 77 | 75 | 72 | | | | |
| 2 | 96 | 89 | 82 | 77 | 92 | 85 | 80 | 75 | 80 | 75 | 71 | 74 | 70 | 67 | 69 | 66 | 63 | 60 | | | | |
| 3 | 88 | 78 | 70 | 64 | 84 | 75 | 68 | 62 | 70 | 64 | 59 | 65 | 61 | 56 | 61 | 57 | 54 | 51 | | | | |
| 4 | 80 | 69 | 60 | 54 | 77 | 67 | 59 | 53 | 62 | 56 | 51 | 58 | 53 | 48 | 54 | 50 | 46 | 43 | | | | |
| 5 | 74 | 61 | 53 | 46 | 71 | 59 | 51 | 45 | 56 | 49 | 43 | 52 | 46 | 42 | 49 | 44 | 40 | 37 | | | | |
| 6 | 68 | 55 | 46 | 40 | 65 | 53 | 45 | 39 | 50 | 43 | 38 | 47 | 41 | 36 | 44 | 39 | 35 | 33 | | | | |
| 7 | 63 | 50 | 41 | 35 | 60 | 48 | 40 | 35 | 45 | 38 | 33 | 43 | 37 | 32 | 40 | 35 | 31 | 29 | | | | |
| 8 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 41 | 34 | 30 | 39 | 33 | 28 | 37 | 31 | 27 | 25 | | | | |
| 9 | 54 | 41 | 33 | 28 | 52 | 40 | 32 | 27 | 38 | 31 | 26 | 36 | 30 | 25 | 34 | 28 | 25 | 23 | | | | |
| 10 | 51 | 38 | 30 | 25 | 49 | 37 | 30 | 25 | 35 | 28 | 24 | 33 | 27 | 23 | 31 | 26 | 22 | 20 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11675 | 11675 | 11675 |
| 5° | 11511 | 11659 | 11809 |
| 10° | 11311 | 11641 | 11822 |
| 15° | 11035 | 11449 | 11444 |
| 20° | 10680 | 11055 | 10883 |
| 25° | 10224 | 10579 | 10665 |
| 30° | 9638 | 10225 | 11476 |
| 35° | 8981 | 10413 | 13430 |
| 40° | 8230 | 11278 | 15525 |
| 45° | 7452 | 12793 | 16688 |
| 50° | 6646 | 14145 | 15530 |
| 55° | 5887 | 14127 | 11866 |
| 60° | 5119 | 11952 | 7255 |
| 65° | 4314 | 8252 | 4395 |
| 70° | 3420 | 5334 | 3173 |
| 75° | 2509 | 3822 | 2942 |
| 80° | 1694 | 3356 | 3319 |
| 85° | 1011 | 3685 | 5246 |



TEST NUMBER: P828662

CATALOG NUMBER: OHBL-24SE-W-UNV-L950-CD-UPL36

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 653.2 | 2.8 |
| 10°-20° | 1849.8 | 7.8 |
| 20°-30° | 2706.8 | 11.5 |
| 30°-40° | 3515.4 | 14.9 |
| 40°-50° | 4292.7 | 18.2 |
| 50°-60° | 3780.4 | 16.0 |
| 60°-70° | 1970.0 | 8.4 |
| 70°-80° | 844.8 | 3.6 |
| 80°-90° | 412.4 | 1.7 |
| 90°-100° | 429.8 | 1.8 |
| 100°-110° | 1201.9 | 5.1 |
| 110°-120° | 966.7 | 4.1 |
| 120°-130° | 462.5 | 2.0 |
| 130°-140° | 234.0 | 1.0 |
| 140°-150° | 134.8 | 0.6 |
| 150°-160° | 76.9 | 0.3 |
| 160°-170° | 38.3 | 0.2 |
| 170°-180° | 11.7 | 0.0 |
| 0°-30° | 5209.8 | 22.1 |
| 0°-40° | 8725.2 | 37.0 |
| 0°-60° | 16798.4 | 71.2 |
| 0°-90° | 20025.5 | 84.9 |
| 90°-120° | 2598.4 | 11.0 |
| 90°-150° | 3429.6 | 14.5 |
| 90°-180° | 3557.0 | 15.1 |
| 0°-180° | 23582.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 6836 | 6836 | 6836 | 6836 | 6836 | |
| 5° | 6772 | 6824 | 6861 | 6921 | 6914 | 642 |
| 15° | 6408 | 6588 | 6651 | 6601 | 6548 | 1804 |
| 25° | 5678 | 5982 | 5880 | 5770 | 5775 | 2606 |
| 35° | 4609 | 5096 | 5351 | 6240 | 6640 | 2873 |
| 45° | 3394 | 4270 | 5836 | 7066 | 7213 | 2617 |
| 55° | 2259 | 3740 | 5435 | 4765 | 4236 | 2028 |
| 65° | 1296 | 2591 | 2488 | 1383 | 1190 | 1283 |
| 75° | 522 | 1212 | 799 | 547 | 519 | 569 |
| 85° | 111 | 432 | 407 | 398 | 403 | 123 |
| 90° | 8 | 199 | 323 | 369 | 378 | 13 |
| 95° | 57 | 199 | 357 | 433 | 454 | 203 |
| 105° | 1290 | 1333 | 1344 | 1063 | 979 | 1227 |
| 115° | 904 | 913 | 976 | 1001 | 995 | 914 |
| 125° | 451 | 471 | 517 | 524 | 517 | 424 |
| 135° | 270 | 276 | 297 | 316 | 319 | 213 |
| 145° | 201 | 203 | 209 | 220 | 224 | 128 |
| 155° | 165 | 168 | 167 | 169 | 169 | 75 |
| 165° | 131 | 133 | 134 | 135 | 136 | 38 |
| 175° | 120 | 120 | 121 | 121 | 122 | 12 |
| 180° | 118 | 118 | 118 | 118 | 118 | |



TEST NUMBER: P828662

CATALOG NUMBER: OHBL-24SE-W-UNV-L950-CD-UPL36

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 6835.8 | 6835.8 | 6835.8 | 6835.8 | 6835.8 |
| 2.5° | 6806.3 | 6835.8 | 6837.3 | 6878.6 | 6874.2 |
| 5° | 6772.4 | 6824.0 | 6860.9 | 6921.3 | 6914.0 |
| 7.5° | 6716.4 | 6797.5 | 6862.4 | 6928.7 | 6922.8 |
| 10° | 6636.7 | 6747.3 | 6832.9 | 6887.4 | 6869.7 |
| 12.5° | 6533.4 | 6679.5 | 6763.5 | 6775.3 | 6741.4 |
| 15° | 6408.1 | 6588.0 | 6651.4 | 6601.3 | 6548.2 |
| 17.5° | 6266.5 | 6477.4 | 6499.5 | 6390.4 | 6324.1 |
| 20° | 6089.5 | 6329.9 | 6307.8 | 6157.4 | 6083.7 |
| 22.5° | 5893.4 | 6167.7 | 6096.9 | 5939.1 | 5868.3 |
| 25° | 5678.1 | 5981.9 | 5880.1 | 5769.5 | 5775.4 |
| 27.5° | 5425.9 | 5770.9 | 5672.2 | 5722.3 | 5816.7 |
| 30° | 5169.3 | 5549.8 | 5489.3 | 5781.3 | 5967.2 |
| 32.5° | 4887.6 | 5322.7 | 5377.2 | 5953.9 | 6257.7 |
| 35° | 4608.8 | 5095.6 | 5350.6 | 6240.0 | 6639.7 |
| 37.5° | 4300.6 | 4865.4 | 5393.4 | 6570.3 | 6989.2 |
| 40° | 4001.2 | 4641.3 | 5490.8 | 6866.8 | 7220.7 |
| 42.5° | 3695.9 | 4440.7 | 5654.4 | 7042.2 | 7318.0 |
| 45° | 3393.5 | 4269.6 | 5835.9 | 7065.9 | 7213.3 |
| 47.5° | 3091.2 | 4125.1 | 5961.3 | 6878.6 | 6810.7 |
| 50° | 2799.2 | 3996.7 | 5970.0 | 6428.8 | 6151.5 |
| 52.5° | 2526.3 | 3878.8 | 5807.9 | 5712.0 | 5281.4 |
| 55° | 2259.4 | 3740.2 | 5434.7 | 4765.2 | 4235.7 |
| 57.5° | 2016.1 | 3548.5 | 4859.5 | 3747.6 | 3169.4 |
| 60° | 1758.0 | 3288.8 | 4116.2 | 2741.7 | 2285.9 |
| 62.5° | 1520.6 | 2965.8 | 3282.9 | 1908.4 | 1643.0 |
| 65° | 1296.3 | 2591.3 | 2488.0 | 1383.4 | 1190.2 |
| 67.5° | 1058.9 | 2203.3 | 1836.2 | 1008.8 | 884.9 |
| 70° | 873.1 | 1843.6 | 1367.2 | 784.6 | 712.3 |
| 72.5° | 682.9 | 1501.4 | 1022.0 | 637.1 | 597.3 |
| 75° | 522.1 | 1212.3 | 799.4 | 547.1 | 519.1 |
| 77.5° | 384.9 | 958.6 | 643.0 | 483.8 | 457.2 |
| 80° | 269.9 | 755.1 | 538.3 | 432.1 | 421.8 |
| 82.5° | 181.4 | 584.0 | 458.6 | 411.5 | 413.0 |
| 85° | 110.6 | 432.1 | 407.1 | 398.2 | 402.6 |
| 87.5° | 53.1 | 306.7 | 349.5 | 362.8 | 367.3 |
| 90° | 8.4 | 198.9 | 323.2 | 369.3 | 377.6 |
| 92.5° | 21.7 | 171.6 | 302.9 | 357.8 | 370.4 |
| 95° | 56.9 | 199.3 | 357.3 | 433.3 | 454.5 |
| 97.5° | 328.1 | 424.7 | 495.1 | 592.6 | 617.9 |
| 100° | 702.6 | 781.3 | 726.7 | 767.9 | 789.7 |
| 102.5° | 1098.2 | 1166.1 | 1029.8 | 910.9 | 887.8 |
| 105° | 1290.1 | 1333.2 | 1343.7 | 1063.1 | 979.1 |



TEST NUMBER: P828662

CATALOG NUMBER: OHBL-24SE-W-UNV-L950-CD-UPL36

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 1060.9 | 1090.0 | 1142.4 | 1159.6 | 1134.7 |
| 115° | 904.4 | 912.8 | 975.9 | 1001.1 | 995.3 |
| 117.5° | 776.3 | 783.8 | 839.4 | 853.7 | 845.6 |
| 120° | 654.6 | 666.3 | 717.8 | 723.4 | 717.9 |
| 122.5° | 544.2 | 563.7 | 609.7 | 617.1 | 607.3 |
| 125° | 451.2 | 471.2 | 517.1 | 523.9 | 516.7 |
| 127.5° | 387.1 | 393.8 | 438.4 | 448.8 | 450.3 |
| 130° | 334.0 | 341.0 | 377.1 | 393.6 | 394.8 |
| 132.5° | 297.5 | 304.5 | 333.8 | 351.2 | 356.7 |
| 135° | 269.7 | 275.8 | 297.4 | 316.3 | 318.7 |
| 137.5° | 247.1 | 252.3 | 267.9 | 286.9 | 290.7 |
| 140° | 228.0 | 233.2 | 244.3 | 262.5 | 264.0 |
| 142.5° | 213.8 | 217.5 | 226.3 | 240.7 | 242.1 |
| 145° | 201.4 | 202.8 | 208.6 | 220.1 | 223.8 |
| 147.5° | 190.9 | 192.9 | 197.3 | 204.1 | 206.4 |
| 150° | 181.4 | 184.0 | 184.5 | 189.2 | 193.0 |
| 152.5° | 172.7 | 175.3 | 175.8 | 176.7 | 180.5 |
| 155° | 164.8 | 167.5 | 167.1 | 168.8 | 168.8 |
| 157.5° | 146.1 | 148.7 | 151.3 | 152.2 | 152.2 |
| 160° | 140.8 | 142.6 | 145.2 | 145.2 | 146.1 |
| 162.5° | 135.6 | 137.4 | 139.1 | 140.0 | 140.8 |
| 165° | 131.3 | 133.0 | 133.9 | 134.8 | 135.6 |
| 167.5° | 127.8 | 128.7 | 129.5 | 130.4 | 130.4 |
| 170° | 124.3 | 125.2 | 126.1 | 126.1 | 126.9 |
| 172.5° | 121.7 | 122.6 | 123.5 | 123.5 | 123.5 |
| 175° | 120.0 | 120.0 | 120.9 | 120.9 | 121.7 |
| 177.5° | 118.2 | 119.1 | 119.1 | 119.1 | 120.0 |
| 180° | 118.2 | 118.2 | 118.2 | 118.2 | 118.2 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|--------|--------|--------|--------|---------------|
| 107.5° | 1303.7 | 1344.7 | 1391.5 | 1265.3 | <i>1117.0</i> |
| 110° | 1203.7 | 1247.5 | 1296.8 | 1270.9 | <i>1205.1</i> |



(END OF REPORT)