

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: P828655

Luminaire Tested: **OHBL-24SE-N-UNV-L950-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P828655
REPORT IS A COMBINATION OF REPORTS P826248 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-24SE-N-UNV-L950-CD-UPL24
Description:
Light Source: -
Ballast/Driver: -

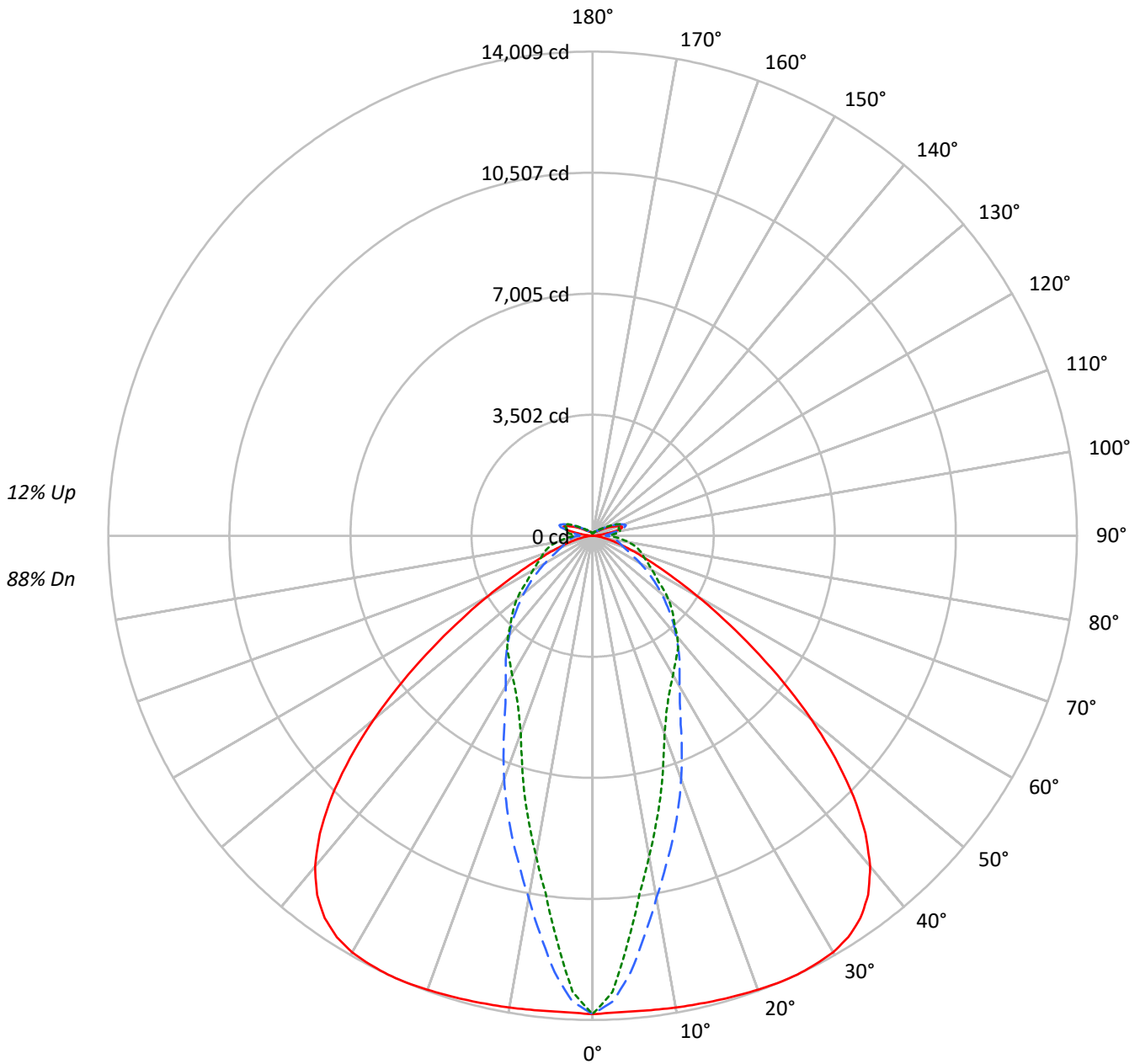
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22529.3 lumens
Efficiency: N/A
Efficacy: 145.0 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 155.4
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: P828655
CATALOG NUMBER: OHBL-24SE-N-UNV-L950-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P828655

CATALOG NUMBER: OHBL-24SE-N-UNV-L950-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 | 104 | 104 | 104 | 97 | 97 | 97 | 91 | 91 | 91 | 88 | | | | | | | | | | | | | | | | | | | |
| 1 | 107 | 102 | 98 | 95 | 103 | 99 | 95 | 92 | 92 | 90 | 87 | 86 | 84 | 82 | 81 | 79 | 78 | 75 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 91 | 84 | 79 | 94 | 88 | 82 | 77 | 82 | 78 | 74 | 77 | 74 | 70 | 73 | 70 | 67 | 64 | | | | | | | | | | | | | | | | | | | |
| 3 | 90 | 81 | 74 | 68 | 87 | 78 | 72 | 66 | 74 | 68 | 64 | 69 | 65 | 61 | 65 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | |
| 4 | 83 | 73 | 65 | 59 | 80 | 71 | 63 | 58 | 67 | 60 | 56 | 63 | 58 | 54 | 59 | 55 | 52 | 49 | | | | | | | | | | | | | | | | | | | |
| 5 | 77 | 66 | 58 | 52 | 75 | 64 | 56 | 51 | 61 | 54 | 49 | 57 | 52 | 48 | 54 | 50 | 46 | 44 | | | | | | | | | | | | | | | | | | | |
| 6 | 72 | 60 | 52 | 46 | 69 | 58 | 51 | 45 | 55 | 49 | 44 | 53 | 47 | 43 | 50 | 45 | 41 | 39 | | | | | | | | | | | | | | | | | | | |
| 7 | 67 | 55 | 47 | 41 | 65 | 53 | 46 | 41 | 51 | 44 | 40 | 48 | 43 | 38 | 46 | 41 | 37 | 35 | | | | | | | | | | | | | | | | | | | |
| 8 | 63 | 50 | 43 | 37 | 61 | 49 | 42 | 37 | 47 | 41 | 36 | 45 | 39 | 35 | 43 | 38 | 34 | 32 | | | | | | | | | | | | | | | | | | | |
| 9 | 59 | 47 | 39 | 34 | 57 | 46 | 38 | 34 | 44 | 37 | 33 | 42 | 36 | 32 | 40 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 10 | 56 | 43 | 36 | 31 | 54 | 42 | 35 | 31 | 41 | 34 | 30 | 39 | 33 | 29 | 37 | 32 | 29 | 27 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 23637 | 23637 | 23637 |
| 5° | 23474 | 21526 | 20111 |
| 10° | 23624 | 18132 | 16205 |
| 15° | 23966 | 15507 | 13366 |
| 20° | 24513 | 13112 | 10867 |
| 25° | 25224 | 10853 | 9573 |
| 30° | 25946 | 9350 | 8945 |
| 35° | 26320 | 8521 | 8576 |
| 40° | 25690 | 7697 | 8193 |
| 45° | 23447 | 6956 | 7645 |
| 50° | 19600 | 6145 | 7242 |
| 55° | 14730 | 5382 | 6516 |
| 60° | 10182 | 4616 | 6324 |
| 65° | 6728 | 3975 | 6303 |
| 70° | 4484 | 3731 | 6776 |
| 75° | 3000 | 3848 | 7509 |
| 80° | 1942 | 4261 | 8219 |
| 85° | 999 | 5330 | 9800 |



TEST NUMBER: P828655

CATALOG NUMBER: OHBL-24SE-N-UNV-L950-CD-UPL24

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1165.0 | 5.2 |
| 10°-20° | 2740.5 | 12.2 |
| 20°-30° | 3435.2 | 15.2 |
| 30°-40° | 3645.1 | 16.2 |
| 40°-50° | 3295.8 | 14.6 |
| 50°-60° | 2389.6 | 10.6 |
| 60°-70° | 1499.6 | 6.7 |
| 70°-80° | 992.4 | 4.4 |
| 80°-90° | 577.1 | 2.6 |
| 90°-100° | 478.6 | 2.1 |
| 100°-110° | 891.0 | 4.0 |
| 110°-120° | 718.3 | 3.2 |
| 120°-130° | 345.1 | 1.5 |
| 130°-140° | 170.4 | 0.8 |
| 140°-150° | 97.9 | 0.4 |
| 150°-160° | 54.9 | 0.2 |
| 160°-170° | 25.2 | 0.1 |
| 170°-180° | 7.7 | 0.0 |
| 0°-30° | 7340.6 | 32.6 |
| 0°-40° | 10985.7 | 48.8 |
| 0°-60° | 16671.1 | 74.0 |
| 0°-90° | 19740.2 | 87.6 |
| 90°-120° | 2087.9 | 9.3 |
| 90°-150° | 2701.3 | 12.0 |
| 90°-180° | 2789.0 | 12.4 |
| 0°-180° | 22529.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 13839 | 13839 | 13839 | 13839 | 13839 | |
| 5° | 13811 | 13457 | 12667 | 12079 | 11775 | ### |
| 15° | 13917 | 11343 | 9009 | 8012 | 7648 | 3947 |
| 25° | 14009 | 8771 | 6032 | 5354 | 5184 | 6472 |
| 35° | 13507 | 5831 | 4378 | 4241 | 4240 | 8397 |
| 45° | 10678 | 3693 | 3173 | 3249 | 3305 | 8134 |
| 55° | 5653 | 2289 | 2070 | 2246 | 2326 | 5108 |
| 65° | 2022 | 1328 | 1199 | 1536 | 1707 | 2104 |
| 75° | 624 | 715 | 805 | 1250 | 1325 | 696 |
| 85° | 109 | 296 | 589 | 819 | 752 | 131 |
| 90° | 4 | 153 | 382 | 535 | 545 | 10 |
| 95° | 51 | 184 | 450 | 606 | 651 | 148 |
| 105° | 883 | 920 | 952 | 812 | 778 | 838 |
| 115° | 616 | 649 | 755 | 790 | 789 | 621 |
| 125° | 310 | 331 | 391 | 410 | 406 | 289 |
| 135° | 187 | 193 | 216 | 237 | 238 | 148 |
| 145° | 142 | 147 | 152 | 163 | 163 | 90 |
| 155° | 117 | 122 | 125 | 128 | 125 | 52 |
| 165° | 87 | 88 | 89 | 89 | 89 | 25 |
| 175° | 78 | 79 | 79 | 80 | 80 | 8 |
| 180° | 78 | 78 | 78 | 78 | 78 | |



TEST NUMBER: P828655

CATALOG NUMBER: OHBL-24SE-N-UNV-L950-CD-UPL24

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 13839.0 | 13839.0 | 13839.0 | 13839.0 | 13839.0 |
| 2.5° | 13810.1 | 13731.0 | 13484.7 | 13334.6 | 13208.1 |
| 5° | 13811.4 | 13457.1 | 12666.8 | 12079.4 | 11775.1 |
| 7.5° | 13831.1 | 13043.5 | 11619.7 | 10762.2 | 10427.7 |
| 10° | 13861.4 | 12531.1 | 10642.3 | 9728.3 | 9416.1 |
| 12.5° | 13883.8 | 11954.3 | 9782.3 | 8843.2 | 8500.7 |
| 15° | 13916.8 | 11343.0 | 9009.1 | 8012.1 | 7648.5 |
| 17.5° | 13947.0 | 10767.5 | 8245.2 | 7203.3 | 6799.0 |
| 20° | 13977.3 | 10147.1 | 7481.2 | 6407.8 | 6074.5 |
| 22.5° | 14006.3 | 9492.5 | 6735.8 | 5790.1 | 5562.2 |
| 25° | 14008.9 | 8770.7 | 6032.5 | 5354.1 | 5184.2 |
| 27.5° | 13974.7 | 8022.6 | 5462.1 | 4989.3 | 4883.9 |
| 30° | 13915.4 | 7296.9 | 5019.6 | 4725.9 | 4650.7 |
| 32.5° | 13767.9 | 6556.7 | 4677.1 | 4471.6 | 4428.2 |
| 35° | 13507.1 | 5830.9 | 4378.1 | 4241.2 | 4239.8 |
| 37.5° | 13096.2 | 5186.8 | 4054.1 | 4030.4 | 4059.3 |
| 40° | 12489.0 | 4623.1 | 3747.2 | 3810.4 | 3810.4 |
| 42.5° | 11678.9 | 4133.2 | 3469.3 | 3533.9 | 3516.7 |
| 45° | 10677.9 | 3693.2 | 3173.0 | 3249.4 | 3304.7 |
| 47.5° | 9517.5 | 3306.0 | 2870.0 | 3017.5 | 3093.9 |
| 50° | 8255.7 | 2937.2 | 2593.4 | 2781.8 | 2868.7 |
| 52.5° | 6933.3 | 2596.1 | 2323.4 | 2539.4 | 2609.2 |
| 55° | 5653.1 | 2289.2 | 2070.5 | 2245.7 | 2326.0 |
| 57.5° | 4494.0 | 1996.8 | 1822.9 | 1988.9 | 2154.8 |
| 60° | 3497.0 | 1745.1 | 1589.8 | 1826.9 | 1992.8 |
| 62.5° | 2671.1 | 1521.3 | 1371.1 | 1675.4 | 1841.3 |
| 65° | 2021.8 | 1327.6 | 1198.6 | 1535.8 | 1707.0 |
| 67.5° | 1523.9 | 1160.4 | 1064.2 | 1434.3 | 1601.6 |
| 70° | 1144.6 | 998.4 | 956.2 | 1371.1 | 1521.3 |
| 72.5° | 845.6 | 849.5 | 870.7 | 1315.8 | 1430.4 |
| 75° | 624.3 | 715.2 | 804.8 | 1249.9 | 1325.0 |
| 77.5° | 446.5 | 592.7 | 745.5 | 1170.9 | 1197.2 |
| 80° | 309.5 | 483.4 | 683.6 | 1066.9 | 1044.5 |
| 82.5° | 193.6 | 387.3 | 628.3 | 952.3 | 890.4 |
| 85° | 109.3 | 296.4 | 588.8 | 819.3 | 752.1 |
| 87.5° | 48.8 | 221.3 | 515.0 | 638.8 | 596.7 |
| 90° | 4.3 | 153.4 | 382.0 | 534.6 | 544.7 |
| 92.5° | 17.4 | 141.9 | 377.4 | 528.6 | 553.1 |
| 95° | 51.4 | 183.5 | 449.9 | 606.5 | 651.0 |
| 97.5° | 240.5 | 329.4 | 554.0 | 708.9 | 753.4 |
| 100° | 487.8 | 578.0 | 670.7 | 783.7 | 804.8 |
| 102.5° | 750.9 | 800.5 | 775.7 | 799.1 | 802.7 |
| 105° | 882.6 | 920.5 | 952.5 | 812.3 | 777.6 |



TEST NUMBER: P828655

CATALOG NUMBER: OHBL-24SE-N-UNV-L950-CD-UPL24

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 715.6 | 757.7 | 863.7 | 887.2 | 865.9 |
| 115° | 616.2 | 648.6 | 755.3 | 790.4 | 789.1 |
| 117.5° | 530.5 | 551.1 | 648.2 | 680.2 | 682.3 |
| 120° | 441.9 | 467.2 | 554.1 | 577.4 | 572.2 |
| 122.5° | 373.2 | 394.1 | 465.2 | 485.8 | 479.3 |
| 125° | 309.7 | 330.6 | 390.6 | 409.6 | 405.7 |
| 127.5° | 263.2 | 277.1 | 329.3 | 348.6 | 346.4 |
| 130° | 231.0 | 240.6 | 280.9 | 300.2 | 301.1 |
| 132.5° | 205.3 | 214.1 | 243.8 | 265.8 | 264.9 |
| 135° | 187.0 | 193.2 | 216.4 | 236.6 | 238.3 |
| 137.5° | 172.2 | 178.8 | 194.6 | 214.3 | 214.3 |
| 140° | 159.2 | 165.4 | 177.6 | 195.1 | 196.0 |
| 142.5° | 149.3 | 154.1 | 162.8 | 177.7 | 177.7 |
| 145° | 141.9 | 146.7 | 151.9 | 163.3 | 162.8 |
| 147.5° | 134.1 | 140.2 | 143.2 | 151.5 | 150.2 |
| 150° | 128.0 | 133.6 | 136.2 | 141.1 | 140.7 |
| 152.5° | 121.9 | 127.5 | 130.2 | 133.7 | 132.3 |
| 155° | 116.7 | 122.3 | 125.4 | 127.6 | 124.9 |
| 157.5° | 96.5 | 98.2 | 100.0 | 100.9 | 100.9 |
| 160° | 93.0 | 93.9 | 95.6 | 96.5 | 96.5 |
| 162.5° | 89.6 | 90.4 | 91.3 | 92.2 | 92.2 |
| 165° | 86.9 | 87.8 | 88.7 | 88.7 | 88.7 |
| 167.5° | 84.3 | 84.3 | 85.2 | 86.1 | 86.1 |
| 170° | 81.7 | 82.6 | 82.6 | 83.5 | 83.5 |
| 172.5° | 80.0 | 80.9 | 80.9 | 80.9 | 81.7 |
| 175° | 78.2 | 79.1 | 79.1 | 80.0 | 80.0 |
| 177.5° | 78.2 | 78.2 | 78.2 | 78.2 | 78.2 |
| 180° | 78.2 | 78.2 | 78.2 | 78.2 | 78.2 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|--------|-------|-------|
| 107.5° | 886.1 | 933.0 | 1011.4 | 893.3 | 796.4 |
| 110° | 819.5 | 864.3 | 959.5 | 941.3 | 865.3 |



(END OF REPORT)