

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: P827749

Luminaire Tested: **OHBL-24SE-MCL-UNV-L930-CD-UPL24**

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827749
REPORT IS A COMBINATION OF REPORTS P826246 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-MCL-UNV-L930-CD-UPL24
Description:
Light Source: -
Ballast/Driver: -

Summary

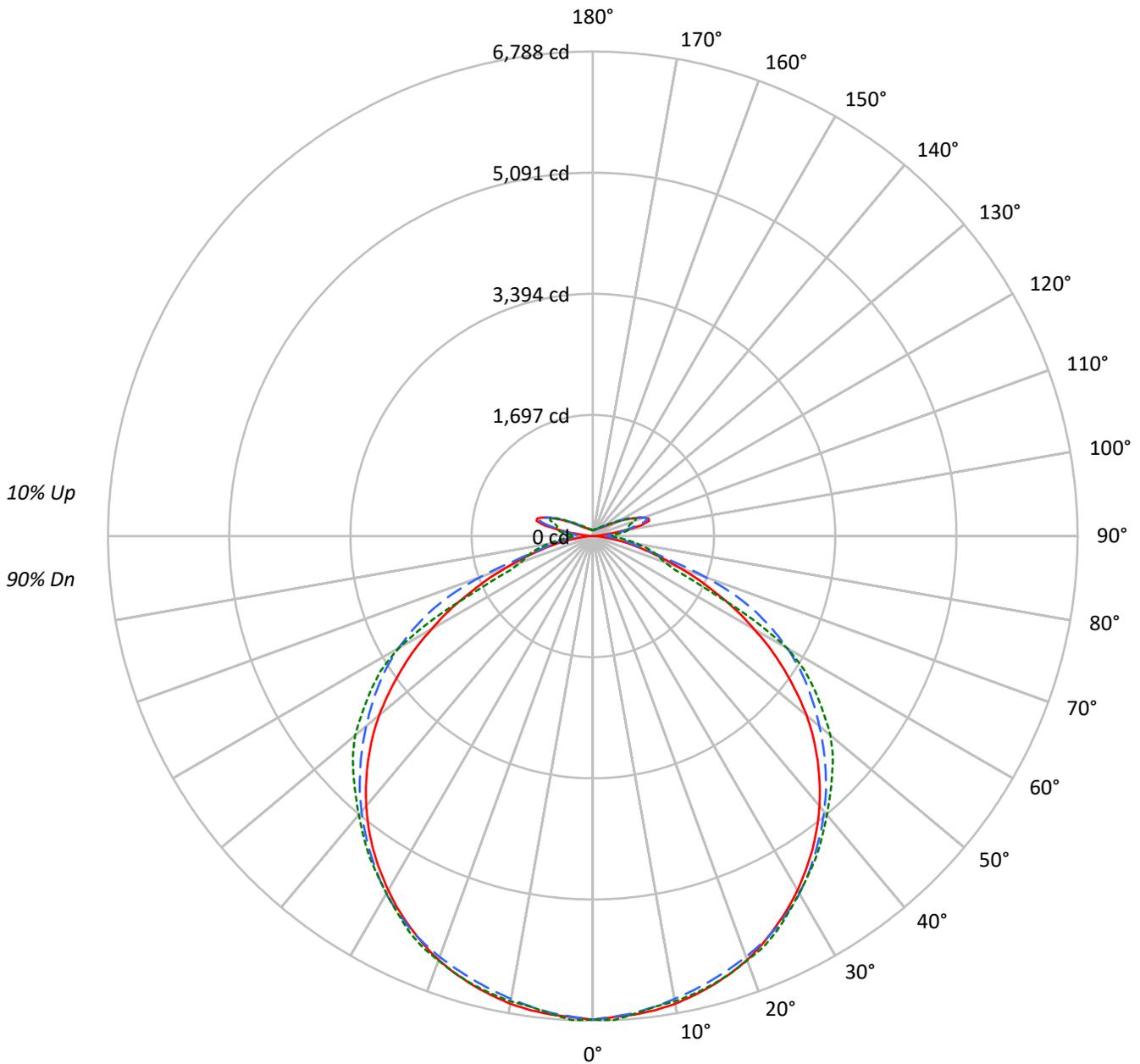
Lumens per Lamp: N/A
Luminaire Lumens: 21102.6 lumens
Efficiency: N/A
Efficacy: 135.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 155.4
Input Voltage (V): NR
Input Current (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: P827749

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L930-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P827749

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L930-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 | 117 | 117 | 117 | 117 | 113 | 113 | 113 | 113 | 105 | 105 | 105 | 99 | 99 | 99 | 93 | 93 | 93 | 90 | | | | | | | | | | | | | | | | | | | |
| 1 | 107 | 102 | 98 | 94 | 103 | 99 | 95 | 92 | 93 | 90 | 87 | 87 | 85 | 83 | 82 | 80 | 78 | 76 | | | | | | | | | | | | | | | | | | | |
| 2 | 97 | 89 | 83 | 77 | 94 | 87 | 81 | 76 | 81 | 77 | 72 | 77 | 73 | 69 | 72 | 69 | 66 | 63 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 79 | 71 | 64 | 85 | 76 | 69 | 63 | 72 | 66 | 61 | 68 | 63 | 58 | 64 | 60 | 56 | 54 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 70 | 61 | 55 | 78 | 68 | 60 | 54 | 64 | 57 | 52 | 60 | 55 | 50 | 57 | 52 | 48 | 46 | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 62 | 53 | 47 | 72 | 60 | 52 | 46 | 57 | 50 | 45 | 54 | 48 | 43 | 51 | 46 | 42 | 40 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 41 | 66 | 54 | 46 | 40 | 52 | 44 | 39 | 49 | 43 | 38 | 46 | 41 | 37 | 35 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 51 | 42 | 36 | 62 | 49 | 41 | 36 | 47 | 40 | 35 | 45 | 38 | 34 | 42 | 37 | 33 | 31 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 46 | 38 | 32 | 57 | 45 | 37 | 32 | 43 | 36 | 31 | 41 | 35 | 30 | 39 | 33 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 42 | 34 | 29 | 53 | 41 | 34 | 28 | 39 | 33 | 28 | 38 | 31 | 27 | 36 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 50 | 38 | 31 | 26 | 36 | 30 | 25 | 35 | 29 | 25 | 33 | 28 | 24 | 22 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11570 | 11570 | 11570 |
| 5° | 11438 | 11396 | 11474 |
| 10° | 11341 | 11219 | 11395 |
| 15° | 11213 | 11085 | 11367 |
| 20° | 11084 | 10998 | 11317 |
| 25° | 10892 | 10911 | 11270 |
| 30° | 10685 | 10776 | 11112 |
| 35° | 10448 | 10566 | 11054 |
| 40° | 10154 | 10349 | 10959 |
| 45° | 9771 | 10098 | 10963 |
| 50° | 9274 | 9812 | 10964 |
| 55° | 8532 | 9530 | 10657 |
| 60° | 7588 | 9120 | 9972 |
| 65° | 6395 | 8368 | 6420 |
| 70° | 5026 | 6519 | 4755 |
| 75° | 3633 | 3858 | 4984 |
| 80° | 2379 | 3193 | 5025 |
| 85° | 1191 | 2900 | 5284 |



TEST NUMBER: P827749

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L930-CD-UPL24

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 638.7 | 3.0 |
| 10°-20° | 1831.5 | 8.7 |
| 20°-30° | 2797.3 | 13.3 |
| 30°-40° | 3394.1 | 16.1 |
| 40°-50° | 3557.4 | 16.9 |
| 50°-60° | 3223.5 | 15.3 |
| 60°-70° | 2161.3 | 10.2 |
| 70°-80° | 970.5 | 4.6 |
| 80°-90° | 357.2 | 1.7 |
| 90°-100° | 293.4 | 1.4 |
| 100°-110° | 700.7 | 3.3 |
| 110°-120° | 583.2 | 2.8 |
| 120°-130° | 281.6 | 1.3 |
| 130°-140° | 143.5 | 0.7 |
| 140°-150° | 84.0 | 0.4 |
| 150°-160° | 50.0 | 0.2 |
| 160°-170° | 26.5 | 0.1 |
| 170°-180° | 8.1 | 0.0 |
| 0°-30° | 5267.6 | 25.0 |
| 0°-40° | 8661.8 | 41.0 |
| 0°-60° | 15442.7 | 73.2 |
| 0°-90° | 18931.6 | 89.7 |
| 90°-120° | 1577.3 | 7.5 |
| 90°-150° | 2086.4 | 9.9 |
| 90°-180° | 2171.0 | 10.3 |
| 0°-180° | 21102.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 6774 | 6774 | 6774 | 6774 | 6774 | |
| 5° | 6730 | 6753 | 6706 | 6727 | 6718 | 640 |
| 15° | 6511 | 6486 | 6440 | 6497 | 6505 | 1838 |
| 25° | 6049 | 6023 | 6065 | 6121 | 6103 | 2788 |
| 35° | 5362 | 5374 | 5429 | 5487 | 5465 | 3351 |
| 45° | 4450 | 4522 | 4606 | 4724 | 4739 | 3428 |
| 55° | 3274 | 3432 | 3666 | 3813 | 3804 | 2923 |
| 65° | 1922 | 2222 | 2523 | 2129 | 1739 | 1915 |
| 75° | 756 | 1097 | 807 | 826 | 880 | 826 |
| 85° | 130 | 250 | 320 | 387 | 406 | 159 |
| 90° | 5 | 111 | 204 | 258 | 273 | 11 |
| 95° | 44 | 142 | 253 | 322 | 351 | 134 |
| 105° | 815 | 824 | 738 | 553 | 517 | 774 |
| 115° | 567 | 577 | 593 | 600 | 597 | 571 |
| 125° | 280 | 296 | 311 | 313 | 312 | 263 |
| 135° | 170 | 175 | 181 | 188 | 190 | 135 |
| 145° | 126 | 130 | 133 | 134 | 136 | 80 |
| 155° | 104 | 106 | 108 | 109 | 108 | 48 |
| 165° | 92 | 92 | 93 | 93 | 93 | 26 |
| 175° | 84 | 84 | 83 | 83 | 83 | 8 |
| 180° | 82 | 82 | 82 | 82 | 82 | |



TEST NUMBER: P827749

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L930-CD-UPL24

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 6773.9 | 6773.9 | 6773.9 | 6773.9 | 6773.9 |
| 2.5° | 6746.5 | 6774.9 | 6739.6 | 6777.9 | 6787.7 |
| 5° | 6729.9 | 6753.4 | 6706.3 | 6727.0 | 6718.1 |
| 7.5° | 6699.5 | 6707.3 | 6651.5 | 6668.2 | 6650.6 |
| 10° | 6654.4 | 6650.6 | 6584.9 | 6617.3 | 6621.1 |
| 12.5° | 6587.8 | 6576.1 | 6517.3 | 6566.3 | 6567.3 |
| 15° | 6511.4 | 6486.0 | 6439.9 | 6496.7 | 6504.6 |
| 17.5° | 6423.3 | 6390.0 | 6359.6 | 6433.1 | 6421.3 |
| 20° | 6320.4 | 6281.2 | 6275.4 | 6355.7 | 6326.3 |
| 22.5° | 6193.1 | 6162.7 | 6176.5 | 6252.9 | 6234.3 |
| 25° | 6049.2 | 6022.7 | 6064.8 | 6120.6 | 6103.0 |
| 27.5° | 5897.4 | 5881.7 | 5929.6 | 5972.8 | 5938.4 |
| 30° | 5730.8 | 5722.0 | 5785.6 | 5820.9 | 5777.8 |
| 32.5° | 5549.6 | 5552.5 | 5613.3 | 5661.2 | 5621.2 |
| 35° | 5361.6 | 5374.3 | 5429.2 | 5487.0 | 5465.4 |
| 37.5° | 5154.9 | 5183.3 | 5238.2 | 5303.8 | 5281.2 |
| 40° | 4936.5 | 4977.6 | 5038.3 | 5117.6 | 5097.1 |
| 42.5° | 4700.5 | 4752.4 | 4830.7 | 4918.9 | 4916.8 |
| 45° | 4449.7 | 4522.1 | 4606.4 | 4723.9 | 4738.6 |
| 47.5° | 4189.1 | 4270.4 | 4377.2 | 4533.9 | 4556.4 |
| 50° | 3906.1 | 4008.0 | 4141.2 | 4329.2 | 4342.9 |
| 52.5° | 3590.7 | 3729.8 | 3906.1 | 4086.3 | 4069.6 |
| 55° | 3274.3 | 3432.0 | 3666.1 | 3813.1 | 3804.2 |
| 57.5° | 2958.9 | 3136.3 | 3420.3 | 3525.1 | 3524.1 |
| 60° | 2606.3 | 2830.6 | 3141.1 | 3220.5 | 3142.1 |
| 62.5° | 2280.1 | 2521.1 | 2843.4 | 2785.6 | 2517.2 |
| 65° | 1921.7 | 2222.4 | 2523.1 | 2129.3 | 1738.6 |
| 67.5° | 1603.4 | 1916.8 | 2143.1 | 1458.4 | 1248.8 |
| 70° | 1283.1 | 1628.9 | 1671.0 | 1082.3 | 1067.6 |
| 72.5° | 999.0 | 1367.3 | 1152.8 | 926.6 | 973.6 |
| 75° | 756.1 | 1097.0 | 807.0 | 825.7 | 879.5 |
| 77.5° | 551.4 | 842.4 | 627.8 | 723.8 | 767.9 |
| 80° | 379.0 | 596.5 | 512.2 | 608.3 | 638.6 |
| 82.5° | 238.0 | 393.7 | 410.4 | 489.8 | 521.1 |
| 85° | 130.3 | 249.8 | 320.3 | 386.9 | 405.5 |
| 87.5° | 53.8 | 150.8 | 244.8 | 298.8 | 314.4 |
| 90° | 5.0 | 110.7 | 203.5 | 257.8 | 273.2 |
| 92.5° | 14.7 | 100.1 | 193.4 | 249.9 | 267.3 |
| 95° | 43.8 | 141.6 | 252.7 | 322.4 | 350.6 |
| 97.5° | 219.4 | 276.4 | 348.0 | 421.0 | 451.5 |
| 100° | 449.1 | 508.0 | 461.6 | 500.1 | 510.4 |
| 102.5° | 693.4 | 712.9 | 566.2 | 528.2 | 524.6 |
| 105° | 814.6 | 824.4 | 738.1 | 553.4 | 516.7 |



TEST NUMBER: P827749

CATALOG NUMBER: OHBL-24SE-MCL-UNV-L930-CD-UPL24

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 660.0 | 676.6 | 683.2 | 673.4 | 649.5 |
| 115° | 567.2 | 576.7 | 593.4 | 599.6 | 596.8 |
| 117.5° | 486.4 | 489.1 | 507.1 | 512.2 | 514.9 |
| 120° | 403.9 | 413.8 | 433.8 | 434.6 | 430.8 |
| 122.5° | 340.1 | 349.8 | 365.4 | 368.7 | 364.8 |
| 125° | 280.1 | 295.6 | 311.0 | 313.1 | 311.8 |
| 127.5° | 239.0 | 249.5 | 265.5 | 269.2 | 269.3 |
| 130° | 209.1 | 216.6 | 229.6 | 234.3 | 235.1 |
| 132.5° | 187.5 | 194.1 | 202.7 | 209.8 | 209.0 |
| 135° | 170.5 | 174.7 | 181.3 | 187.9 | 190.4 |
| 137.5° | 157.7 | 160.1 | 165.0 | 172.3 | 173.3 |
| 140° | 145.6 | 148.8 | 151.9 | 157.5 | 159.2 |
| 142.5° | 134.1 | 138.3 | 140.6 | 145.1 | 146.1 |
| 145° | 126.0 | 130.2 | 132.6 | 134.4 | 136.2 |
| 147.5° | 119.7 | 122.9 | 124.6 | 126.2 | 127.2 |
| 150° | 114.1 | 115.7 | 118.1 | 118.9 | 119.7 |
| 152.5° | 108.4 | 110.0 | 112.4 | 113.2 | 113.2 |
| 155° | 103.5 | 106.1 | 107.8 | 108.6 | 107.6 |
| 157.5° | 99.5 | 102.1 | 103.7 | 104.5 | 104.5 |
| 160° | 96.3 | 98.1 | 99.7 | 100.5 | 100.5 |
| 162.5° | 94.0 | 94.8 | 95.6 | 96.4 | 96.4 |
| 165° | 91.6 | 92.4 | 93.2 | 93.2 | 93.2 |
| 167.5° | 89.2 | 90.1 | 90.0 | 90.8 | 90.8 |
| 170° | 86.7 | 87.5 | 87.5 | 87.4 | 87.4 |
| 172.5° | 85.1 | 85.9 | 85.9 | 85.0 | 85.8 |
| 175° | 83.5 | 84.3 | 83.3 | 83.2 | 83.2 |
| 177.5° | 84.5 | 83.5 | 82.5 | 81.6 | 80.6 |
| 180° | 82.5 | 82.5 | 82.5 | 82.5 | 82.5 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 818.9 | 835.8 | 802.2 | 647.1 | 550.4 |
| 110° | 756.8 | 773.9 | 762.0 | 708.6 | 631.3 |



(END OF REPORT)