

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: P828288

Luminaire Tested: **OHBL-15SE-NL-UNV-L940-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P828288
REPORT IS A COMBINATION OF REPORTS P826225 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-15SE-NL-UNV-L940-CD-UPL24
Description:
Light Source: -
Ballast/Driver: -

Summary

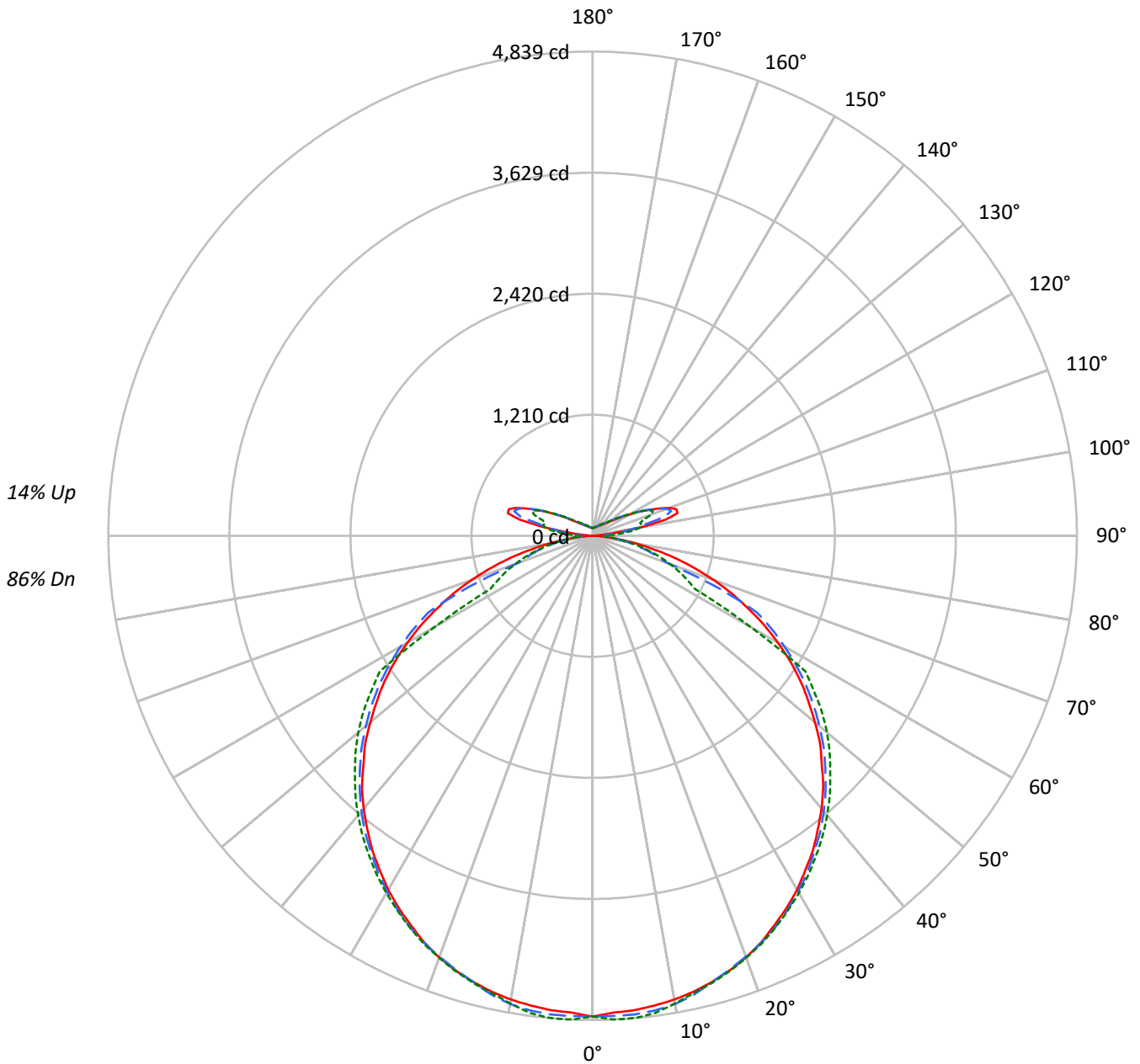
Lumens per Lamp: N/A
Luminaire Lumens: 15591.9 lumens
Efficiency: N/A
Efficacy: 149.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 0.88' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 104.4
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: P828288

CATALOG NUMBER: OHBL-15SE-NL-UNV-L940-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P828288

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|---|
| RF | 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 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 111 | 103 | 103 | 103 | 96 | 96 | 96 | 89 | 89 | 89 | 86 | | | | | | | | |
| 1 | 106 | 102 | 98 | 94 | 102 | 98 | 94 | 91 | 91 | 88 | 86 | 85 | 83 | 81 | 79 | 78 | 76 | 73 | | | | | | | | |
| 2 | 97 | 89 | 82 | 77 | 93 | 86 | 80 | 75 | 80 | 75 | 71 | 75 | 71 | 68 | 70 | 67 | 64 | 61 | | | | | | | | |
| 3 | 88 | 78 | 70 | 64 | 85 | 76 | 68 | 63 | 71 | 65 | 60 | 66 | 61 | 57 | 62 | 58 | 54 | 52 | | | | | | | | |
| 4 | 81 | 69 | 61 | 54 | 77 | 67 | 59 | 53 | 63 | 56 | 51 | 59 | 53 | 49 | 55 | 51 | 47 | 44 | | | | | | | | |
| 5 | 74 | 62 | 53 | 47 | 71 | 60 | 52 | 46 | 56 | 49 | 44 | 53 | 47 | 42 | 50 | 45 | 41 | 38 | | | | | | | | |
| 6 | 68 | 56 | 47 | 41 | 66 | 54 | 46 | 40 | 51 | 44 | 39 | 48 | 42 | 37 | 45 | 40 | 36 | 33 | | | | | | | | |
| 7 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 35 | 46 | 39 | 34 | 43 | 37 | 33 | 41 | 36 | 32 | 30 | | | | | | | | |
| 8 | 59 | 46 | 38 | 32 | 57 | 44 | 37 | 31 | 42 | 35 | 30 | 40 | 34 | 29 | 38 | 32 | 28 | 26 | | | | | | | | |
| 9 | 55 | 42 | 34 | 29 | 53 | 41 | 33 | 28 | 39 | 32 | 27 | 37 | 31 | 26 | 35 | 29 | 26 | 24 | | | | | | | | |
| 10 | 51 | 39 | 31 | 26 | 50 | 38 | 30 | 25 | 36 | 29 | 25 | 34 | 28 | 24 | 32 | 27 | 23 | 21 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15629 | 15629 | 15629 |
| 5° | 15389 | 15548 | 15765 |
| 10° | 15240 | 15424 | 15602 |
| 15° | 15082 | 15138 | 15466 |
| 20° | 14903 | 14958 | 15389 |
| 25° | 14637 | 14808 | 15319 |
| 30° | 14396 | 14587 | 15252 |
| 35° | 14116 | 14331 | 15192 |
| 40° | 13792 | 14082 | 15147 |
| 45° | 13368 | 13753 | 15053 |
| 50° | 12913 | 13384 | 14993 |
| 55° | 12372 | 12927 | 14739 |
| 60° | 11611 | 12285 | 11386 |
| 65° | 10569 | 11476 | 7584 |
| 70° | 9263 | 5805 | 7250 |
| 75° | 7442 | 5123 | 6760 |
| 80° | 4954 | 4120 | 5919 |
| 85° | 1787 | 3047 | 5122 |



TEST NUMBER: P828288

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 456.4 | 2.9 |
| 10°-20° | 1306.8 | 8.4 |
| 20°-30° | 1988.4 | 12.8 |
| 30°-40° | 2417.6 | 15.5 |
| 40°-50° | 2542.0 | 16.3 |
| 50°-60° | 2321.1 | 14.9 |
| 60°-70° | 1488.0 | 9.5 |
| 70°-80° | 702.9 | 4.5 |
| 80°-90° | 200.3 | 1.3 |
| 90°-100° | 253.2 | 1.6 |
| 100°-110° | 713.9 | 4.6 |
| 110°-120° | 604.2 | 3.9 |
| 120°-130° | 288.0 | 1.8 |
| 130°-140° | 144.1 | 0.9 |
| 140°-150° | 83.5 | 0.5 |
| 150°-160° | 48.7 | 0.3 |
| 160°-170° | 25.2 | 0.2 |
| 170°-180° | 7.7 | 0.0 |
| 0°-30° | 3751.6 | 24.1 |
| 0°-40° | 6169.1 | 39.6 |
| 0°-60° | 11032.2 | 70.8 |
| 0°-90° | 13423.3 | 86.1 |
| 90°-120° | 1571.4 | 10.1 |
| 90°-150° | 2087.0 | 13.4 |
| 90°-180° | 2169.0 | 13.9 |
| 0°-180° | 15591.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4804 | 4804 | 4804 | 4804 | 4804 | |
| 5° | 4759 | 4778 | 4802 | 4828 | 4838 | 453 |
| 15° | 4615 | 4650 | 4614 | 4621 | 4624 | 1303 |
| 25° | 4295 | 4302 | 4317 | 4324 | 4320 | 1982 |
| 35° | 3839 | 3816 | 3860 | 3907 | 3896 | 2399 |
| 45° | 3238 | 3232 | 3287 | 3364 | 3358 | 2503 |
| 55° | 2537 | 2518 | 2603 | 2690 | 2697 | 2263 |
| 65° | 1710 | 1710 | 1809 | 1038 | 1041 | 1695 |
| 75° | 845 | 861 | 559 | 588 | 591 | 890 |
| 85° | 110 | 140 | 174 | 189 | 179 | 163 |
| 90° | 4 | 77 | 118 | 146 | 150 | 8 |
| 95° | 49 | 121 | 205 | 273 | 299 | 145 |
| 105° | 876 | 872 | 747 | 536 | 493 | 832 |
| 115° | 606 | 614 | 616 | 612 | 602 | 610 |
| 125° | 294 | 310 | 316 | 315 | 312 | 276 |
| 135° | 174 | 177 | 184 | 185 | 187 | 137 |
| 145° | 126 | 130 | 132 | 133 | 134 | 80 |
| 155° | 101 | 103 | 104 | 105 | 105 | 47 |
| 165° | 87 | 88 | 89 | 89 | 89 | 25 |
| 175° | 78 | 79 | 79 | 80 | 80 | 8 |
| 180° | 78 | 78 | 78 | 78 | 78 | |



TEST NUMBER: P828288

CATALOG NUMBER: OHBL-15SE-NL-UNV-L940-CD-UPL24

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4803.9 | 4803.9 | 4803.9 | 4803.9 | 4803.9 |
| 2.5° | 4770.2 | 4786.3 | 4803.9 | 4826.7 | 4839.3 |
| 5° | 4759.3 | 4777.9 | 4802.3 | 4828.5 | 4838.5 |
| 7.5° | 4735.7 | 4761.8 | 4785.4 | 4803.9 | 4809.9 |
| 10° | 4706.1 | 4737.4 | 4750.9 | 4749.2 | 4745.0 |
| 12.5° | 4666.6 | 4699.4 | 4695.3 | 4675.8 | 4679.2 |
| 15° | 4615.1 | 4649.7 | 4614.3 | 4621.0 | 4624.4 |
| 17.5° | 4554.4 | 4588.1 | 4546.8 | 4560.3 | 4561.2 |
| 20° | 4483.6 | 4508.9 | 4476.9 | 4487.9 | 4487.9 |
| 22.5° | 4398.5 | 4416.2 | 4402.7 | 4410.3 | 4412.0 |
| 25° | 4294.8 | 4301.5 | 4316.7 | 4323.5 | 4320.1 |
| 27.5° | 4195.4 | 4186.9 | 4216.5 | 4232.5 | 4223.9 |
| 30° | 4084.9 | 4071.4 | 4106.0 | 4132.1 | 4122.0 |
| 32.5° | 3958.5 | 3950.1 | 3989.7 | 4020.8 | 4014.9 |
| 35° | 3838.8 | 3816.0 | 3859.8 | 3907.0 | 3896.1 |
| 37.5° | 3697.1 | 3683.7 | 3733.4 | 3783.2 | 3777.3 |
| 40° | 3558.9 | 3536.1 | 3592.6 | 3651.7 | 3645.8 |
| 42.5° | 3410.6 | 3383.5 | 3445.1 | 3515.9 | 3509.2 |
| 45° | 3237.7 | 3231.8 | 3286.6 | 3364.1 | 3358.3 |
| 47.5° | 3084.4 | 3054.9 | 3131.5 | 3206.6 | 3213.4 |
| 50° | 2898.8 | 2887.9 | 2957.9 | 3049.0 | 3055.7 |
| 52.5° | 2717.7 | 2710.1 | 2783.4 | 2875.3 | 2887.1 |
| 55° | 2537.2 | 2517.9 | 2603.0 | 2689.9 | 2696.7 |
| 57.5° | 2344.3 | 2324.0 | 2410.9 | 2505.3 | 2519.6 |
| 60° | 2137.7 | 2118.3 | 2213.5 | 2301.2 | 1830.1 |
| 62.5° | 1931.2 | 1917.7 | 2017.2 | 1428.8 | 1151.5 |
| 65° | 1709.5 | 1709.5 | 1808.9 | 1037.7 | 1041.1 |
| 67.5° | 1502.1 | 1488.7 | 1348.8 | 932.2 | 932.2 |
| 70° | 1279.6 | 1284.7 | 777.1 | 816.8 | 817.6 |
| 72.5° | 1056.2 | 1074.8 | 671.0 | 702.9 | 704.7 |
| 75° | 844.6 | 860.7 | 558.9 | 588.4 | 590.9 |
| 77.5° | 620.4 | 477.1 | 449.2 | 472.1 | 472.9 |
| 80° | 435.8 | 300.9 | 344.0 | 365.8 | 363.3 |
| 82.5° | 254.5 | 210.7 | 252.1 | 268.0 | 267.2 |
| 85° | 110.4 | 139.9 | 174.5 | 188.8 | 178.7 |
| 87.5° | 35.3 | 86.9 | 108.7 | 117.2 | 116.2 |
| 90° | 4.3 | 76.8 | 118.4 | 145.7 | 150.2 |
| 92.5° | 14.8 | 76.2 | 130.1 | 173.0 | 185.1 |
| 95° | 48.6 | 120.9 | 205.3 | 273.3 | 299.3 |
| 97.5° | 235.6 | 270.7 | 311.8 | 388.5 | 418.9 |
| 100° | 481.7 | 523.8 | 437.4 | 476.8 | 485.6 |
| 102.5° | 745.8 | 749.0 | 553.3 | 508.6 | 502.5 |
| 105° | 876.2 | 871.8 | 747.3 | 536.0 | 492.6 |



TEST NUMBER: P828288

CATALOG NUMBER: OHBL-15SE-NL-UNV-L940-CD-UPL24

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 707.6 | 719.7 | 708.3 | 685.8 | 652.0 |
| 115° | 605.8 | 613.7 | 616.1 | 611.9 | 601.6 |
| 117.5° | 514.7 | 515.6 | 519.1 | 518.2 | 519.1 |
| 120° | 426.0 | 435.6 | 443.4 | 439.1 | 433.9 |
| 122.5° | 357.3 | 367.8 | 373.0 | 371.3 | 366.0 |
| 125° | 293.9 | 309.5 | 315.6 | 314.7 | 312.1 |
| 127.5° | 248.7 | 260.0 | 268.7 | 269.5 | 268.7 |
| 130° | 216.5 | 223.4 | 232.1 | 233.0 | 233.9 |
| 132.5° | 192.1 | 198.2 | 204.3 | 207.8 | 206.9 |
| 135° | 173.9 | 177.4 | 183.5 | 185.2 | 186.9 |
| 137.5° | 159.1 | 161.7 | 166.9 | 169.5 | 169.5 |
| 140° | 146.1 | 149.5 | 153.9 | 155.6 | 156.5 |
| 142.5° | 134.8 | 138.2 | 141.7 | 143.5 | 143.5 |
| 145° | 126.1 | 129.5 | 132.2 | 133.0 | 133.9 |
| 147.5° | 118.2 | 121.7 | 123.5 | 125.2 | 125.2 |
| 150° | 112.2 | 113.9 | 116.5 | 117.4 | 118.2 |
| 152.5° | 106.1 | 107.8 | 110.4 | 111.3 | 111.3 |
| 155° | 100.9 | 102.6 | 104.3 | 105.2 | 105.2 |
| 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° | 879.7 | 887.4 | 822.9 | 641.4 | 530.3 |
| 110° | 812.8 | 823.1 | 786.5 | 716.2 | 625.0 |



(END OF REPORT)