

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: P828290

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

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P828290
REPORT IS A COMBINATION OF REPORTS P826226 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-W-UNV-L940-CD-UPL24
Description:
Light Source: -
Ballast/Driver: -

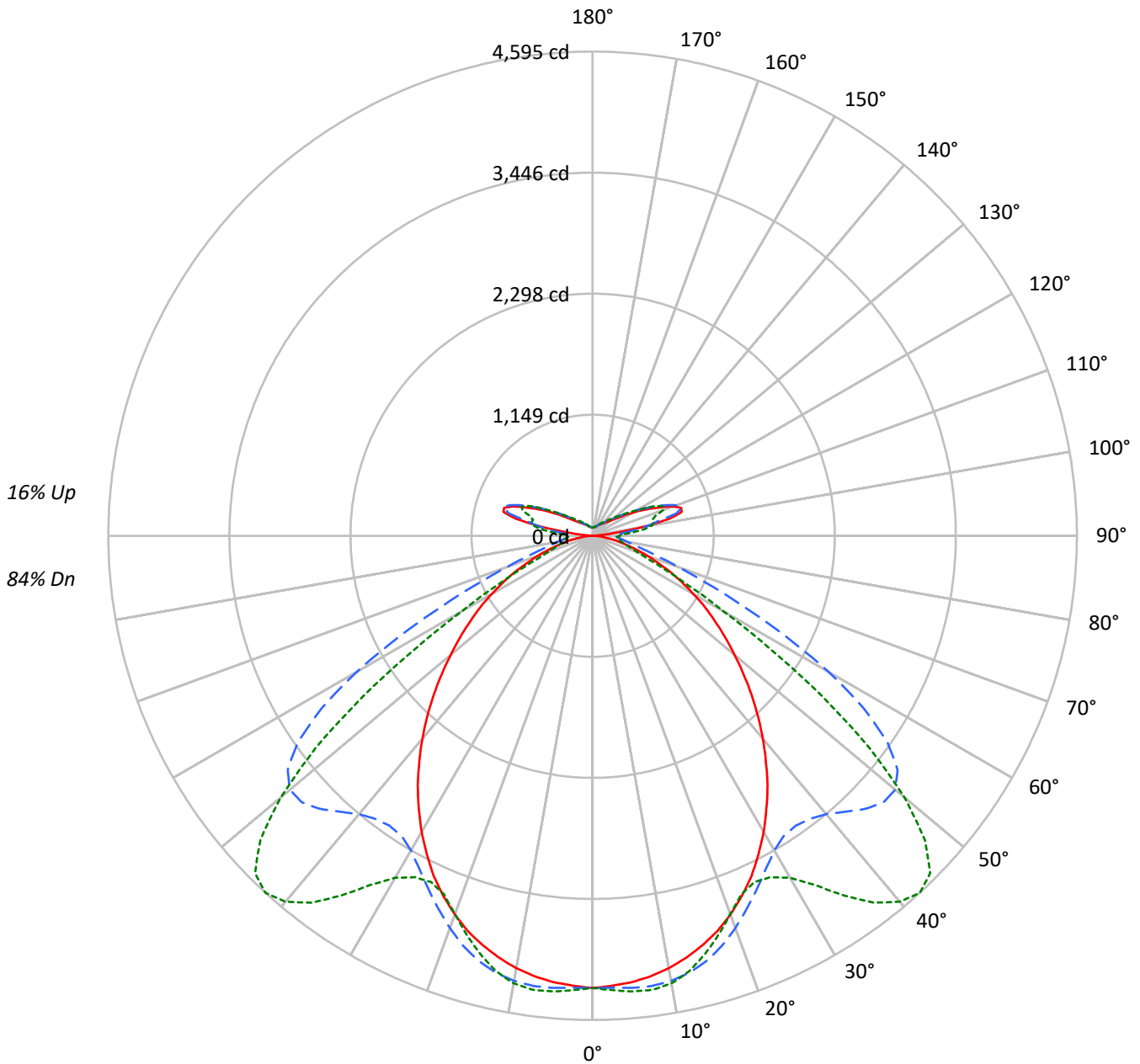
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14955.6 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 0.88' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 104.4
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: P828290
CATALOG NUMBER: OHBL-15SE-W-UNV-L940-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P828290

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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 | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 102 | 102 | 102 | 95 | 95 | 95 | 87 | 87 | 87 | 84 | | | | | | | | | | | | | | | | | | | |
| 1 | 106 | 101 | 97 | 93 | 101 | 97 | 94 | 90 | 90 | 87 | 85 | 84 | 81 | 79 | 78 | 76 | 74 | 71 | | | | | | | | | | | | | | | | | | | |
| 2 | 96 | 88 | 82 | 77 | 92 | 85 | 79 | 74 | 79 | 74 | 70 | 74 | 70 | 66 | 68 | 65 | 63 | 60 | | | | | | | | | | | | | | | | | | | |
| 3 | 88 | 78 | 70 | 64 | 84 | 75 | 68 | 62 | 70 | 64 | 59 | 65 | 60 | 56 | 61 | 57 | 53 | 50 | | | | | | | | | | | | | | | | | | | |
| 4 | 80 | 69 | 60 | 54 | 77 | 66 | 59 | 53 | 62 | 55 | 50 | 58 | 52 | 48 | 54 | 49 | 46 | 43 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 61 | 53 | 46 | 70 | 59 | 51 | 45 | 55 | 48 | 43 | 52 | 46 | 41 | 48 | 43 | 40 | 37 | | | | | | | | | | | | | | | | | | | |
| 6 | 68 | 55 | 46 | 40 | 65 | 53 | 45 | 39 | 50 | 43 | 38 | 47 | 41 | 36 | 44 | 39 | 35 | 32 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 50 | 41 | 35 | 60 | 48 | 40 | 34 | 45 | 38 | 33 | 42 | 36 | 32 | 40 | 34 | 31 | 28 | | | | | | | | | | | | | | | | | | | |
| 8 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 30 | 41 | 34 | 29 | 39 | 33 | 28 | 36 | 31 | 27 | 25 | | | | | | | | | | | | | | | | | | | |
| 9 | 54 | 41 | 33 | 28 | 52 | 40 | 32 | 27 | 38 | 31 | 26 | 35 | 30 | 25 | 33 | 28 | 24 | 22 | | | | | | | | | | | | | | | | | | | |
| 10 | 51 | 38 | 30 | 25 | 49 | 37 | 29 | 25 | 35 | 28 | 24 | 33 | 27 | 23 | 31 | 26 | 22 | 20 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13964 | 13964 | 13964 |
| 5° | 13659 | 13867 | 14122 |
| 10° | 13319 | 13770 | 14139 |
| 15° | 12893 | 13468 | 13686 |
| 20° | 12379 | 12931 | 13016 |
| 25° | 11754 | 12301 | 12755 |
| 30° | 10985 | 11816 | 13726 |
| 35° | 10140 | 11954 | 16061 |
| 40° | 9199 | 12852 | 18568 |
| 45° | 8234 | 14460 | 19958 |
| 50° | 7250 | 15841 | 18573 |
| 55° | 6326 | 15648 | 14191 |
| 60° | 5400 | 13063 | 8677 |
| 65° | 4449 | 8870 | 5256 |
| 70° | 3423 | 5609 | 3794 |
| 75° | 2408 | 3896 | 3519 |
| 80° | 1526 | 3263 | 3969 |
| 85° | 816 | 3294 | 6275 |



TEST NUMBER: P828290

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

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 410.2 | 2.7 |
| 10°-20° | 1161.4 | 7.8 |
| 20°-30° | 1699.6 | 11.4 |
| 30°-40° | 2207.3 | 14.8 |
| 40°-50° | 2695.3 | 18.0 |
| 50°-60° | 2373.7 | 15.9 |
| 60°-70° | 1236.9 | 8.3 |
| 70°-80° | 530.4 | 3.5 |
| 80°-90° | 260.1 | 1.7 |
| 90°-100° | 321.3 | 2.1 |
| 100°-110° | 774.2 | 5.2 |
| 110°-120° | 644.3 | 4.3 |
| 120°-130° | 311.9 | 2.1 |
| 130°-140° | 156.1 | 1.0 |
| 140°-150° | 89.3 | 0.6 |
| 150°-160° | 50.7 | 0.3 |
| 160°-170° | 25.2 | 0.2 |
| 170°-180° | 7.7 | 0.1 |
| 0°-30° | 3271.2 | 21.9 |
| 0°-40° | 5478.4 | 36.6 |
| 0°-60° | 10547.4 | 70.5 |
| 0°-90° | 12574.9 | 84.1 |
| 90°-120° | 1739.8 | 11.6 |
| 90°-150° | 2297.1 | 15.4 |
| 90°-180° | 2381.0 | 15.9 |
| 0°-180° | 14955.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4292 | 4292 | 4292 | 4292 | 4292 | |
| 5° | 4252 | 4285 | 4308 | 4346 | 4341 | 403 |
| 15° | 4024 | 4137 | 4176 | 4145 | 4112 | 1133 |
| 25° | 3565 | 3756 | 3692 | 3622 | 3626 | 1636 |
| 35° | 2894 | 3199 | 3360 | 3918 | 4169 | 1804 |
| 45° | 2131 | 2681 | 3664 | 4436 | 4529 | 1643 |
| 55° | 1419 | 2348 | 3412 | 2992 | 2660 | 1273 |
| 65° | 814 | 1627 | 1562 | 869 | 747 | 805 |
| 75° | 328 | 761 | 502 | 344 | 326 | 357 |
| 85° | 70 | 271 | 256 | 250 | 253 | 77 |
| 90° | 5 | 128 | 209 | 246 | 257 | 8 |
| 95° | 48 | 154 | 284 | 356 | 386 | 145 |
| 105° | 876 | 895 | 821 | 627 | 586 | 831 |
| 115° | 607 | 626 | 662 | 672 | 668 | 613 |
| 125° | 300 | 319 | 347 | 356 | 354 | 281 |
| 135° | 180 | 183 | 198 | 210 | 213 | 142 |
| 145° | 134 | 135 | 139 | 145 | 148 | 85 |
| 155° | 108 | 110 | 110 | 111 | 111 | 50 |
| 165° | 87 | 88 | 89 | 89 | 89 | 25 |
| 175° | 78 | 79 | 79 | 80 | 80 | 8 |
| 180° | 78 | 78 | 78 | 78 | 78 | |



TEST NUMBER: P828290

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

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4292.1 | 4292.1 | 4292.1 | 4292.1 | 4292.1 |
| 2.5° | 4273.6 | 4292.1 | 4293.0 | 4319.0 | 4316.2 |
| 5° | 4252.3 | 4284.7 | 4307.8 | 4345.8 | 4341.1 |
| 7.5° | 4217.1 | 4268.0 | 4308.8 | 4350.4 | 4346.7 |
| 10° | 4167.1 | 4236.5 | 4290.3 | 4324.5 | 4313.4 |
| 12.5° | 4102.2 | 4193.9 | 4246.7 | 4254.1 | 4232.8 |
| 15° | 4023.5 | 4136.6 | 4176.4 | 4144.8 | 4111.5 |
| 17.5° | 3934.7 | 4067.1 | 4080.9 | 4012.4 | 3970.8 |
| 20° | 3823.6 | 3974.5 | 3960.6 | 3866.2 | 3819.8 |
| 22.5° | 3700.4 | 3872.6 | 3828.2 | 3729.0 | 3684.6 |
| 25° | 3565.2 | 3755.9 | 3692.0 | 3622.5 | 3626.3 |
| 27.5° | 3406.8 | 3623.5 | 3561.4 | 3593.0 | 3652.2 |
| 30° | 3245.7 | 3484.6 | 3446.7 | 3630.0 | 3746.7 |
| 32.5° | 3068.8 | 3342.0 | 3376.2 | 3738.4 | 3929.1 |
| 35° | 2893.8 | 3199.4 | 3359.6 | 3918.0 | 4168.9 |
| 37.5° | 2700.2 | 3055.0 | 3386.4 | 4125.4 | 4388.4 |
| 40° | 2512.3 | 2914.2 | 3447.5 | 4311.6 | 4533.8 |
| 42.5° | 2320.6 | 2788.2 | 3550.4 | 4421.7 | 4594.9 |
| 45° | 2130.7 | 2680.8 | 3664.3 | 4436.5 | 4529.1 |
| 47.5° | 1940.9 | 2590.1 | 3743.0 | 4319.0 | 4276.4 |
| 50° | 1757.6 | 2509.5 | 3748.5 | 4036.5 | 3862.4 |
| 52.5° | 1586.3 | 2435.4 | 3646.6 | 3586.5 | 3316.1 |
| 55° | 1418.7 | 2348.4 | 3412.4 | 2991.9 | 2659.5 |
| 57.5° | 1265.8 | 2228.0 | 3051.2 | 2353.0 | 1990.0 |
| 60° | 1103.8 | 2065.0 | 2584.5 | 1721.5 | 1435.4 |
| 62.5° | 954.7 | 1862.2 | 2061.3 | 1198.3 | 1031.6 |
| 65° | 814.0 | 1627.0 | 1562.2 | 868.6 | 747.3 |
| 67.5° | 664.9 | 1383.5 | 1152.9 | 633.4 | 555.6 |
| 70° | 548.2 | 1157.5 | 858.4 | 492.6 | 447.2 |
| 72.5° | 428.7 | 942.7 | 641.7 | 400.0 | 375.1 |
| 75° | 327.8 | 761.2 | 501.9 | 343.5 | 326.0 |
| 77.5° | 241.7 | 601.9 | 403.8 | 303.7 | 287.1 |
| 80° | 169.5 | 474.1 | 338.0 | 271.4 | 264.8 |
| 82.5° | 113.9 | 366.7 | 288.0 | 258.4 | 259.3 |
| 85° | 69.5 | 271.4 | 255.6 | 250.1 | 252.8 |
| 87.5° | 33.3 | 192.6 | 219.4 | 227.8 | 230.6 |
| 90° | 5.3 | 127.7 | 209.4 | 246.5 | 257.3 |
| 92.5° | 14.8 | 114.2 | 210.8 | 260.9 | 276.8 |
| 95° | 47.9 | 153.9 | 283.8 | 355.7 | 386.4 |
| 97.5° | 235.7 | 300.2 | 392.6 | 474.0 | 505.4 |
| 100° | 482.7 | 550.3 | 518.6 | 565.3 | 575.9 |
| 102.5° | 744.4 | 773.4 | 633.7 | 598.4 | 593.2 |
| 105° | 875.8 | 894.9 | 820.8 | 627.2 | 586.4 |



TEST NUMBER: P828290

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

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 708.1 | 735.2 | 760.2 | 753.1 | 727.1 |
| 115° | 607.2 | 626.3 | 661.5 | 671.7 | 668.3 |
| 117.5° | 521.2 | 532.3 | 566.3 | 576.5 | 578.4 |
| 120° | 432.5 | 449.5 | 484.2 | 490.9 | 486.6 |
| 122.5° | 363.9 | 378.9 | 409.1 | 417.6 | 413.2 |
| 125° | 300.4 | 318.8 | 347.1 | 355.5 | 353.8 |
| 127.5° | 254.2 | 266.5 | 295.5 | 305.6 | 305.7 |
| 130° | 222.1 | 229.0 | 254.4 | 264.5 | 267.2 |
| 132.5° | 197.7 | 203.8 | 222.8 | 235.6 | 236.6 |
| 135° | 179.5 | 182.9 | 198.2 | 210.2 | 212.8 |
| 137.5° | 164.7 | 167.3 | 178.9 | 190.8 | 192.7 |
| 140° | 151.6 | 155.1 | 163.2 | 174.1 | 176.0 |
| 142.5° | 141.3 | 143.8 | 150.1 | 159.2 | 160.2 |
| 145° | 133.5 | 135.1 | 138.7 | 145.0 | 147.8 |
| 147.5° | 125.6 | 128.2 | 130.0 | 135.4 | 136.3 |
| 150° | 119.5 | 121.3 | 122.1 | 124.8 | 127.5 |
| 152.5° | 113.5 | 115.2 | 116.0 | 116.9 | 118.7 |
| 155° | 108.2 | 110.0 | 109.9 | 110.8 | 110.8 |
| 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° | 880.1 | 907.7 | 889.0 | 727.4 | 623.1 |
| 110° | 812.3 | 840.6 | 844.9 | 792.8 | 709.5 |



(END OF REPORT)