

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: P828303

Luminaire Tested: **OHBL-18HE-NL-UNV-L940-CD-UPL12**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P828303
REPORT IS A COMBINATION OF REPORTS P826063 AND G3-2310-221-12
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-18HE-NL-UNV-L940-CD-UPL12
Description:
Light Source: -
Ballast/Driver: -

Summary

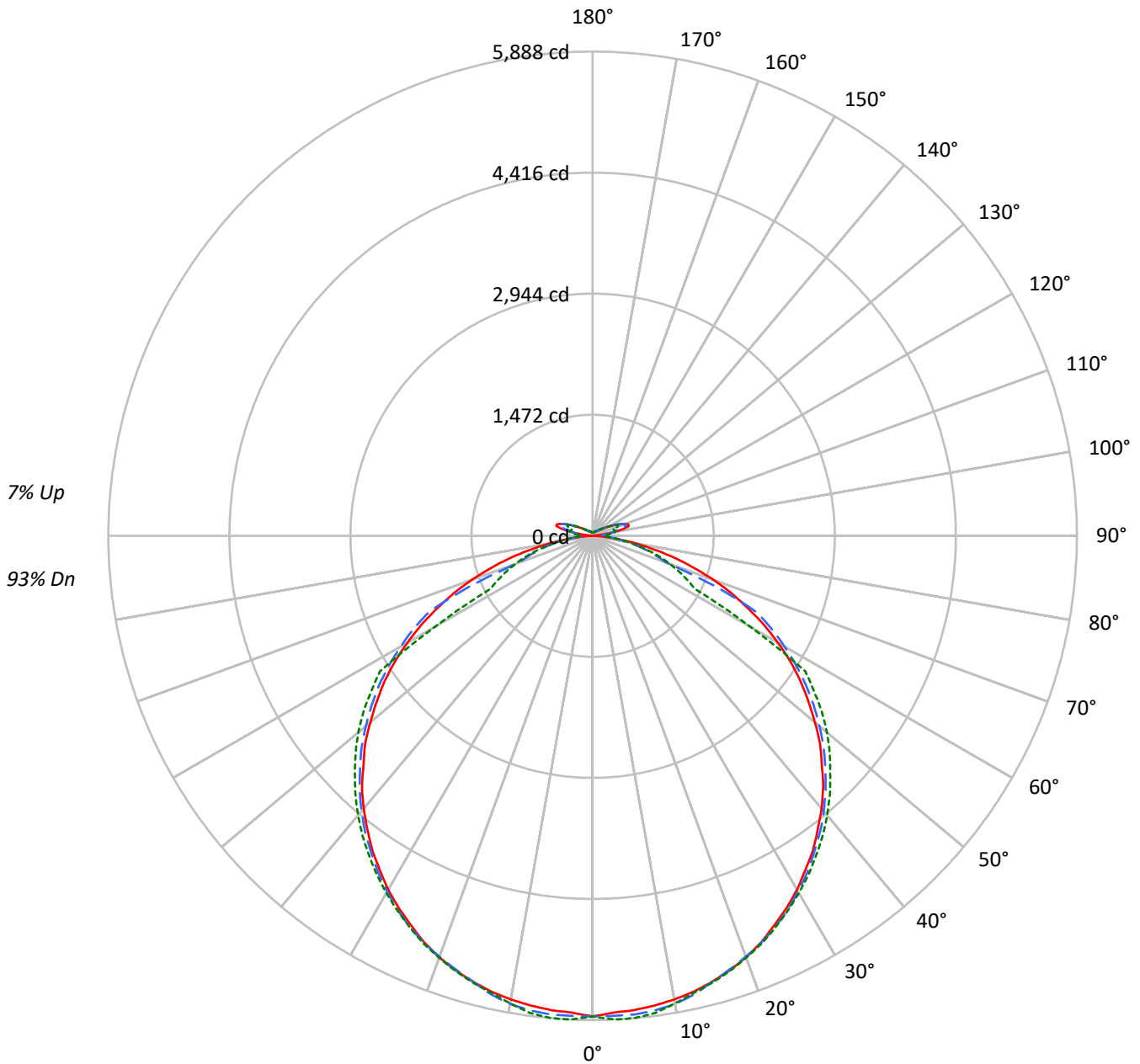
Lumens per Lamp: N/A
Luminaire Lumens: 17492.6 lumens
Efficiency: N/A
Efficacy: 157.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.1')
CIE Type: Direct

Input Watts (W): 111.4
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: P828303

CATALOG NUMBER: OHBL-18HE-NL-UNV-L940-CD-UPL12

Luminous Intensity Polar Plot





TEST NUMBER: P828303

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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 | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 96 | 96 | 96 | 93 | | | | | | | | | | | | | | | | | | | |
| 1 | 108 | 103 | 99 | 95 | 104 | 100 | 97 | 93 | 95 | 92 | 89 | 90 | 87 | 85 | 85 | 83 | 82 | 79 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 90 | 84 | 78 | 95 | 88 | 82 | 77 | 83 | 78 | 74 | 79 | 75 | 71 | 75 | 72 | 69 | 66 | | | | | | | | | | | | | | | | | | | |
| 3 | 90 | 79 | 72 | 65 | 87 | 77 | 70 | 64 | 73 | 67 | 62 | 70 | 65 | 60 | 67 | 62 | 59 | 56 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 62 | 55 | 79 | 69 | 61 | 55 | 65 | 59 | 53 | 62 | 56 | 52 | 59 | 54 | 50 | 48 | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 63 | 54 | 48 | 73 | 61 | 53 | 47 | 59 | 51 | 46 | 56 | 50 | 45 | 53 | 48 | 44 | 42 | | | | | | | | | | | | | | | | | | | |
| 6 | 70 | 57 | 48 | 41 | 67 | 55 | 47 | 41 | 53 | 46 | 40 | 51 | 44 | 39 | 48 | 43 | 38 | 36 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 51 | 43 | 37 | 62 | 50 | 42 | 36 | 48 | 41 | 35 | 46 | 40 | 35 | 44 | 38 | 34 | 32 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 47 | 38 | 33 | 58 | 46 | 38 | 32 | 44 | 37 | 32 | 42 | 36 | 31 | 40 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 43 | 35 | 29 | 54 | 42 | 34 | 29 | 40 | 33 | 28 | 39 | 32 | 28 | 37 | 32 | 27 | 26 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 32 | 26 | 51 | 39 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 25 | 35 | 29 | 25 | 23 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|-------|
| 0° | 9983 | 9983 | 9983 |
| 5° | 9876 | 9964 | 10070 |
| 10° | 9827 | 9918 | 9966 |
| 15° | 9772 | 9767 | 9879 |
| 20° | 9703 | 9685 | 9830 |
| 25° | 9580 | 9623 | 9785 |
| 30° | 9474 | 9517 | 9742 |
| 35° | 9346 | 9390 | 9704 |
| 40° | 9192 | 9270 | 9675 |
| 45° | 8976 | 9102 | 9615 |
| 50° | 8746 | 8913 | 9577 |
| 55° | 8467 | 8673 | 9414 |
| 60° | 8048 | 8319 | 7273 |
| 65° | 7448 | 7864 | 4844 |
| 70° | 6674 | 4043 | 4631 |
| 75° | 5541 | 3653 | 4318 |
| 80° | 3891 | 3057 | 3780 |
| 85° | 1561 | 2449 | 3271 |



TEST NUMBER: P828303

CATALOG NUMBER: OHBL-18HE-NL-UNV-L940-CD-UPL12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 555.3 | 3.2 |
| 10°-20° | 1589.9 | 9.1 |
| 20°-30° | 2419.2 | 13.8 |
| 30°-40° | 2941.4 | 16.8 |
| 40°-50° | 3092.7 | 17.7 |
| 50°-60° | 2824.0 | 16.1 |
| 60°-70° | 1810.3 | 10.3 |
| 70°-80° | 855.2 | 4.9 |
| 80°-90° | 239.9 | 1.4 |
| 90°-100° | 166.2 | 1.0 |
| 100°-110° | 377.1 | 2.2 |
| 110°-120° | 313.9 | 1.8 |
| 120°-130° | 148.1 | 0.8 |
| 130°-140° | 74.1 | 0.4 |
| 140°-150° | 43.1 | 0.2 |
| 150°-160° | 25.2 | 0.1 |
| 160°-170° | 13.1 | 0.1 |
| 170°-180° | 4.0 | 0.0 |
| 0°-30° | 4564.4 | 26.1 |
| 0°-40° | 7505.7 | 42.9 |
| 0°-60° | 13422.5 | 76.7 |
| 0°-90° | 16327.9 | 93.3 |
| 90°-120° | 857.2 | 4.9 |
| 90°-150° | 1122.5 | 6.4 |
| 90°-180° | 1165.0 | 6.7 |
| 0°-180° | 17492.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 5845 | 5845 | 5845 | 5845 | 5845 | |
| 5° | 5790 | 5813 | 5843 | 5875 | 5887 | 551 |
| 15° | 5615 | 5657 | 5614 | 5622 | 5626 | 1585 |
| 25° | 5225 | 5233 | 5252 | 5260 | 5256 | 2411 |
| 35° | 4670 | 4643 | 4696 | 4754 | 4740 | 2919 |
| 45° | 3939 | 3932 | 3999 | 4093 | 4086 | 3045 |
| 55° | 3087 | 3063 | 3167 | 3273 | 3281 | 2753 |
| 65° | 2080 | 2080 | 2201 | 1262 | 1267 | 2062 |
| 75° | 1028 | 1047 | 680 | 716 | 719 | 1083 |
| 85° | 134 | 170 | 212 | 230 | 217 | 199 |
| 90° | 3 | 73 | 115 | 139 | 140 | 8 |
| 95° | 25 | 80 | 142 | 192 | 208 | 73 |
| 105° | 455 | 456 | 396 | 285 | 262 | 430 |
| 115° | 318 | 320 | 324 | 318 | 307 | 317 |
| 125° | 153 | 159 | 163 | 161 | 162 | 143 |
| 135° | 89 | 91 | 95 | 96 | 96 | 71 |
| 145° | 65 | 67 | 68 | 69 | 70 | 41 |
| 155° | 52 | 53 | 54 | 55 | 55 | 24 |
| 165° | 45 | 45 | 46 | 46 | 46 | 13 |
| 175° | 41 | 41 | 41 | 41 | 41 | 4 |
| 180° | 40 | 40 | 40 | 40 | 40 | |



TEST NUMBER: P828303

CATALOG NUMBER: OHBL-18HE-NL-UNV-L940-CD-UPL12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 5844.8 | 5844.8 | 5844.8 | 5844.8 | 5844.8 |
| 2.5° | 5803.7 | 5823.3 | 5844.8 | 5872.5 | 5887.8 |
| 5° | 5790.4 | 5812.9 | 5842.8 | 5874.6 | 5886.8 |
| 7.5° | 5761.7 | 5793.5 | 5822.2 | 5844.8 | 5852.0 |
| 10° | 5725.8 | 5763.8 | 5780.2 | 5778.2 | 5773.0 |
| 12.5° | 5677.6 | 5717.6 | 5712.5 | 5688.9 | 5692.9 |
| 15° | 5615.0 | 5657.0 | 5614.1 | 5622.2 | 5626.3 |
| 17.5° | 5541.2 | 5582.3 | 5531.9 | 5548.4 | 5549.4 |
| 20° | 5455.1 | 5485.8 | 5446.8 | 5460.2 | 5460.2 |
| 22.5° | 5351.5 | 5373.0 | 5356.6 | 5365.9 | 5367.9 |
| 25° | 5225.4 | 5233.4 | 5252.0 | 5260.2 | 5256.1 |
| 27.5° | 5104.3 | 5094.1 | 5130.0 | 5149.5 | 5139.1 |
| 30° | 4969.9 | 4953.6 | 4995.6 | 5027.4 | 5015.1 |
| 32.5° | 4816.1 | 4805.9 | 4854.1 | 4892.0 | 4884.8 |
| 35° | 4670.5 | 4642.8 | 4696.1 | 4753.5 | 4740.2 |
| 37.5° | 4498.2 | 4481.8 | 4542.2 | 4602.8 | 4595.7 |
| 40° | 4330.0 | 4302.3 | 4371.0 | 4442.8 | 4435.6 |
| 42.5° | 4149.5 | 4116.6 | 4191.5 | 4277.8 | 4269.5 |
| 45° | 3939.2 | 3932.1 | 3998.7 | 4093.1 | 4085.9 |
| 47.5° | 3752.6 | 3716.7 | 3810.0 | 3901.3 | 3909.5 |
| 50° | 3526.9 | 3513.7 | 3598.8 | 3709.6 | 3717.7 |
| 52.5° | 3306.5 | 3297.3 | 3386.4 | 3498.2 | 3512.6 |
| 55° | 3087.0 | 3063.4 | 3167.0 | 3272.6 | 3280.8 |
| 57.5° | 2852.2 | 2827.5 | 2933.2 | 3048.1 | 3065.5 |
| 60° | 2600.9 | 2577.3 | 2693.1 | 2799.9 | 2226.6 |
| 62.5° | 2349.6 | 2333.2 | 2454.3 | 1738.4 | 1401.0 |
| 65° | 2079.9 | 2079.9 | 2200.8 | 1262.4 | 1266.6 |
| 67.5° | 1827.7 | 1811.2 | 1641.0 | 1134.2 | 1134.2 |
| 70° | 1556.8 | 1563.0 | 945.5 | 993.9 | 994.8 |
| 72.5° | 1285.0 | 1307.6 | 816.4 | 855.3 | 857.4 |
| 75° | 1027.6 | 1047.2 | 679.9 | 715.9 | 718.9 |
| 77.5° | 754.9 | 580.4 | 546.6 | 574.4 | 575.4 |
| 80° | 530.2 | 366.1 | 418.5 | 445.1 | 442.0 |
| 82.5° | 309.7 | 256.4 | 306.7 | 326.2 | 325.1 |
| 85° | 134.3 | 170.2 | 212.3 | 229.8 | 217.4 |
| 87.5° | 43.0 | 105.6 | 132.2 | 142.6 | 141.5 |
| 90° | 2.6 | 73.1 | 115.2 | 138.7 | 140.2 |
| 92.5° | 7.8 | 65.0 | 115.1 | 149.5 | 154.8 |
| 95° | 24.8 | 80.2 | 142.5 | 192.1 | 207.8 |
| 97.5° | 119.5 | 149.3 | 192.5 | 242.1 | 252.9 |
| 100° | 242.1 | 275.6 | 246.6 | 275.5 | 281.0 |
| 102.5° | 386.8 | 390.8 | 294.2 | 281.4 | 278.2 |
| 105° | 454.6 | 455.6 | 395.5 | 285.1 | 262.3 |



TEST NUMBER: P828303

CATALOG NUMBER: OHBL-18HE-NL-UNV-L940-CD-UPL12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 369.6 | 374.3 | 374.7 | 357.8 | 335.7 |
| 115° | 318.1 | 320.1 | 324.0 | 318.4 | 307.0 |
| 117.5° | 262.6 | 266.0 | 268.7 | 266.0 | 264.3 |
| 120° | 220.0 | 225.2 | 226.9 | 223.4 | 223.4 |
| 122.5° | 185.2 | 189.5 | 192.1 | 189.5 | 190.4 |
| 125° | 153.0 | 159.1 | 162.6 | 160.8 | 161.7 |
| 127.5° | 127.8 | 133.0 | 139.1 | 138.2 | 138.2 |
| 130° | 111.3 | 114.8 | 119.1 | 120.0 | 120.0 |
| 132.5° | 99.1 | 101.7 | 105.2 | 106.1 | 106.9 |
| 135° | 88.7 | 91.3 | 94.8 | 95.6 | 95.6 |
| 137.5° | 81.7 | 83.5 | 86.1 | 86.9 | 87.8 |
| 140° | 74.8 | 77.4 | 79.1 | 80.0 | 80.0 |
| 142.5° | 69.6 | 71.3 | 73.0 | 73.9 | 74.8 |
| 145° | 65.2 | 66.9 | 67.8 | 68.7 | 69.6 |
| 147.5° | 60.9 | 62.6 | 64.3 | 64.3 | 65.2 |
| 150° | 58.3 | 59.1 | 60.0 | 60.9 | 60.9 |
| 152.5° | 54.8 | 55.6 | 56.5 | 57.4 | 57.4 |
| 155° | 52.2 | 53.0 | 53.9 | 54.8 | 54.8 |
| 157.5° | 49.6 | 51.3 | 51.3 | 52.2 | 52.2 |
| 160° | 47.8 | 48.7 | 49.6 | 49.6 | 49.6 |
| 162.5° | 46.1 | 47.0 | 47.0 | 47.8 | 47.8 |
| 165° | 45.2 | 45.2 | 46.1 | 46.1 | 46.1 |
| 167.5° | 43.5 | 43.5 | 44.3 | 44.3 | 44.3 |
| 170° | 42.6 | 42.6 | 42.6 | 43.5 | 43.5 |
| 172.5° | 41.7 | 41.7 | 41.7 | 41.7 | 41.7 |
| 175° | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 |
| 177.5° | 40.0 | 40.9 | 40.9 | 40.9 | 40.9 |
| 180° | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 457.2 | 464.0 | 432.5 | 333.5 | 271.7 |
| 110° | 420.0 | 429.2 | 413.1 | 373.4 | 321.8 |



(END OF REPORT)