

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: P830876

Luminaire Tested: **OHBL-90SE-W-UNV-L835-CD**

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P830876  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-285-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-90SE-W-UNV-L835-CD  
Description: 90000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 3500K LEDS AND WIDE LENS  
Light Source: -  
Ballast/Driver: -

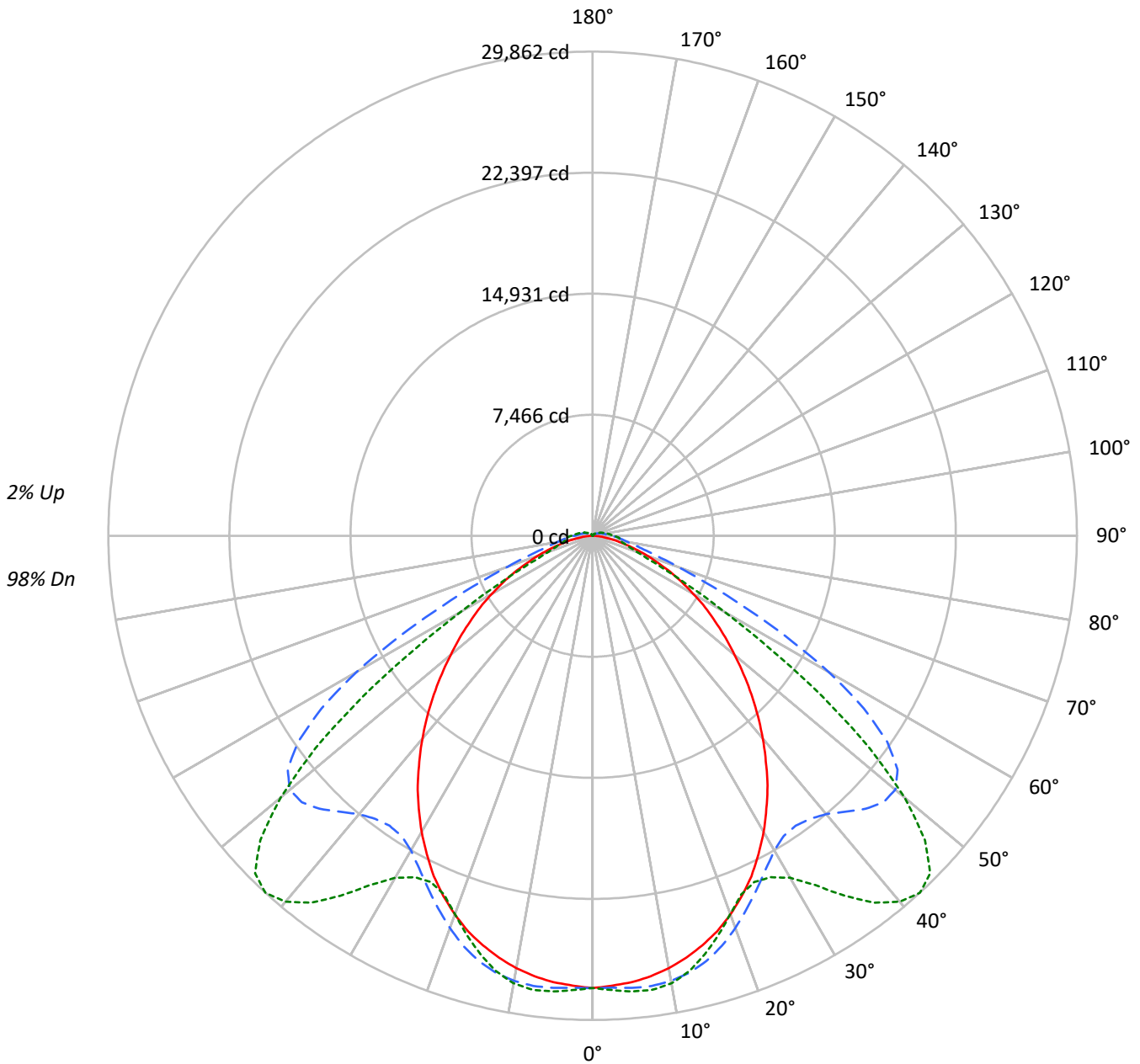
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 83519.0 lumens  
Efficiency: N/A  
Efficacy: 157.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62  
Luminous Opening: Rectangular w/ Sides (W: 1.8' x L: 3.78' x H: 0.17')  
CIE Type: Direct

Input Watts (W): 529  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

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### Luminous Intensity Polar Plot





TEST NUMBER: P830876

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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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 97  | 94  | 91  | 93  | 90  | 88  | 89  | 87  | 85  | 83 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 99  | 91  | 85  | 79  | 96  | 89  | 83  | 78  | 85  | 80  | 76  | 82  | 77  | 74  | 78  | 75  | 72  | 70 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 90  | 80  | 72  | 66  | 88  | 78  | 71  | 65  | 75  | 69  | 64  | 72  | 67  | 62  | 69  | 65  | 61  | 59 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 83  | 71  | 62  | 56  | 80  | 69  | 61  | 55  | 67  | 60  | 54  | 64  | 58  | 53  | 62  | 57  | 52  | 50 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 76  | 63  | 54  | 48  | 74  | 62  | 54  | 47  | 60  | 52  | 47  | 57  | 51  | 46  | 55  | 50  | 45  | 43 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 70  | 57  | 48  | 41  | 68  | 56  | 47  | 41  | 54  | 46  | 41  | 52  | 45  | 40  | 50  | 44  | 40  | 38 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 65  | 51  | 43  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 45  | 40  | 35  | 33 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 60  | 47  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  | 29 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 52  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 36  | 30  | 26  | 35  | 30  | 25  | 24 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 44113 | 44113 | 44113 |
| 5°  | 43702 | 44072 | 44428 |
| 10° | 43154 | 44024 | 44293 |
| 15° | 42312 | 43316 | 42689 |
| 20° | 41159 | 41846 | 40417 |
| 25° | 39616 | 40063 | 39421 |
| 30° | 37563 | 38742 | 42208 |
| 35° | 35221 | 39480 | 49122 |
| 40° | 32504 | 42785 | 56442 |
| 45° | 29663 | 48566 | 60252 |
| 50° | 26700 | 53746 | 55619 |
| 55° | 23915 | 53729 | 42089 |
| 60° | 21080 | 45508 | 25426 |
| 65° | 18085 | 31469 | 15162 |
| 70° | 14694 | 20383 | 10714 |
| 75° | 11178 | 14647 | 9619  |
| 80° | 8024  | 12922 | 10278 |
| 85° | 5446  | 14319 | 14482 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 2665.6  | 3.2       |
| 10°-20°   | 7548.1  | 9.0       |
| 20°-30°   | 11045.4 | 13.2      |
| 30°-40°   | 14344.7 | 17.2      |
| 40°-50°   | 17516.7 | 21.0      |
| 50°-60°   | 15426.2 | 18.5      |
| 60°-70°   | 8038.7  | 9.6       |
| 70°-80°   | 3447.3  | 4.1       |
| 80°-90°   | 1655.5  | 2.0       |
| 90°-100°  | 777.8   | 0.9       |
| 100°-110° | 483.4   | 0.6       |
| 110°-120° | 285.8   | 0.3       |
| 120°-130° | 155.4   | 0.2       |
| 130°-140° | 78.0    | 0.1       |
| 140°-150° | 37.5    | 0.0       |
| 150°-160° | 13.1    | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-30°    | 21259.0 | 25.5      |
| 0°-40°    | 35603.7 | 42.6      |
| 0°-60°    | 68546.5 | 82.1      |
| 0°-90°    | 81688.0 | 97.8      |
| 90°-120°  | 1547.1  | 1.9       |
| 90°-150°  | 1817.9  | 2.2       |
| 90°-180°  | 1831.0  | 2.2       |
| 0°-180°   | 83519.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux  |
|------|-------|-------|-------|-------|-------|-------|
| 0°   | 27894 | 27894 | 27894 | 27894 | 27894 |       |
| 5°   | 27635 | 27846 | 27996 | 28243 | 28213 | ###   |
| 15°  | 26149 | 26883 | 27142 | 26937 | 26720 | 7363  |
| 25°  | 23170 | 24409 | 23994 | 23543 | 23567 | 10633 |
| 35°  | 18806 | 20792 | 21834 | 25462 | 27093 | 11722 |
| 45°  | 13848 | 17422 | 23814 | 28833 | 29434 | 10678 |
| 55°  | 9220  | 15262 | 22177 | 19444 | 17284 | 8275  |
| 65°  | 5290  | 10574 | 10152 | 5645  | 4857  | 5234  |
| 75°  | 2130  | 4947  | 3262  | 2233  | 2118  | 2323  |
| 85°  | 451   | 1763  | 1661  | 1625  | 1643  | 503   |
| 90°  | 6     | 638   | 1095  | 1252  | 1282  | 31    |
| 95°  | 12    | 373   | 873   | 1023  | 1053  | 9     |
| 105° | 24    | 211   | 566   | 680   | 692   | 25    |
| 115° | 36    | 120   | 349   | 427   | 439   | 37    |
| 125° | 42    | 60    | 205   | 265   | 271   | 36    |
| 135° | 36    | 36    | 96    | 162   | 168   | 28    |
| 145° | 48    | 36    | 42    | 78    | 90    | 28    |
| 155° | 48    | 48    | 36    | 36    | 36    | 15    |
| 165° | 0     | 0     | 0     | 0     | 0     | 0     |
| 175° | 0     | 0     | 0     | 0     | 0     | 0     |
| 180° | 0     | 0     | 0     | 0     | 0     |       |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|--------|---------|---------|---------|---------|---------|
| 0°     | 27893.8 | 27893.8 | 27893.8 | 27893.8 | 27893.8 |
| 2.5°   | 27773.5 | 27893.8 | 27899.8 | 28068.3 | 28050.3 |
| 5°     | 27635.0 | 27845.7 | 27996.1 | 28242.9 | 28212.8 |
| 7.5°   | 27406.4 | 27737.4 | 28002.1 | 28273.0 | 28248.9 |
| 10°    | 27081.4 | 27532.7 | 27881.8 | 28104.5 | 28032.2 |
| 12.5°  | 26660.1 | 27255.9 | 27598.9 | 27647.1 | 27508.7 |
| 15°    | 26148.6 | 26882.8 | 27141.6 | 26936.9 | 26720.3 |
| 17.5°  | 25570.8 | 26431.4 | 26521.7 | 26076.4 | 25805.5 |
| 20°    | 24848.7 | 25829.6 | 25739.3 | 25125.5 | 24824.6 |
| 22.5°  | 24048.3 | 25167.6 | 24878.8 | 24234.8 | 23946.0 |
| 25°    | 23169.6 | 24409.4 | 23994.1 | 23542.7 | 23566.8 |
| 27.5°  | 22140.5 | 23548.8 | 23145.6 | 23350.2 | 23735.3 |
| 30°    | 21093.4 | 22646.1 | 22399.3 | 23590.9 | 24349.2 |
| 32.5°  | 19943.9 | 21719.3 | 21941.9 | 24295.0 | 25534.7 |
| 35°    | 18806.5 | 20792.5 | 21833.6 | 25462.5 | 27093.4 |
| 37.5°  | 17548.7 | 19853.7 | 22008.1 | 26810.6 | 28519.7 |
| 40°    | 16327.1 | 18938.9 | 22405.3 | 28020.2 | 29464.5 |
| 42.5°  | 15081.3 | 18120.5 | 23073.3 | 28736.4 | 29861.7 |
| 45°    | 13847.6 | 17422.4 | 23813.6 | 28832.6 | 29434.5 |
| 47.5°  | 12613.9 | 16832.6 | 24325.1 | 28068.3 | 27791.5 |
| 50°    | 11422.3 | 16309.0 | 24361.2 | 26232.8 | 25101.4 |
| 52.5°  | 10309.0 | 15827.6 | 23699.2 | 23308.0 | 21550.8 |
| 55°    | 9219.7  | 15261.9 | 22176.6 | 19444.4 | 17283.9 |
| 57.5°  | 8226.7  | 14479.5 | 19829.6 | 15292.0 | 12932.9 |
| 60°    | 7173.6  | 13420.3 | 16796.5 | 11187.6 | 9328.0  |
| 62.5°  | 6204.6  | 12102.4 | 13396.3 | 7787.4  | 6704.1  |
| 65°    | 5289.9  | 10573.8 | 10152.5 | 5645.0  | 4856.6  |
| 67.5°  | 4321.0  | 8991.0  | 7492.5  | 4116.4  | 3610.9  |
| 70°    | 3562.7  | 7522.6  | 5578.8  | 3201.6  | 2906.7  |
| 72.5°  | 2786.4  | 6126.4  | 4170.5  | 2599.8  | 2437.3  |
| 75°    | 2130.4  | 4946.9  | 3261.8  | 2232.7  | 2118.4  |
| 77.5°  | 1570.7  | 3911.8  | 2623.9  | 1973.9  | 1865.6  |
| 80°    | 1101.3  | 3081.3  | 2196.6  | 1763.3  | 1721.2  |
| 82.5°  | 740.2   | 2383.2  | 1871.6  | 1679.0  | 1685.1  |
| 85°    | 451.4   | 1763.3  | 1661.0  | 1624.9  | 1642.9  |
| 87.5°  | 216.7   | 1251.8  | 1426.3  | 1480.4  | 1498.5  |
| 90°    | 6.0     | 637.9   | 1095.3  | 1251.8  | 1281.9  |
| 92.5°  | 0.0     | 487.5   | 962.9   | 1119.4  | 1149.5  |
| 95°    | 12.0    | 373.1   | 872.6   | 1023.1  | 1053.2  |
| 97.5°  | 12.0    | 306.9   | 782.4   | 938.8   | 956.9   |
| 100°   | 18.1    | 264.8   | 698.1   | 848.5   | 866.6   |
| 102.5° | 18.1    | 234.7   | 625.9   | 758.3   | 770.3   |
| 105°   | 24.1    | 210.6   | 565.7   | 680.0   | 692.1   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°   | 22.5° | 45°   | 67.5° | 90°   |
|--------|------|-------|-------|-------|-------|
| 112.5° | 36.1 | 144.4 | 397.2 | 481.4 | 493.5 |
| 115°   | 36.1 | 120.4 | 349.0 | 427.3 | 439.3 |
| 117.5° | 42.1 | 108.3 | 306.9 | 379.1 | 385.2 |
| 120°   | 42.1 | 90.3  | 264.8 | 337.0 | 343.0 |
| 122.5° | 42.1 | 72.2  | 234.7 | 300.9 | 306.9 |
| 125°   | 42.1 | 60.2  | 204.6 | 264.8 | 270.8 |
| 127.5° | 36.1 | 42.1  | 174.5 | 234.7 | 240.7 |
| 130°   | 36.1 | 36.1  | 144.4 | 204.6 | 216.7 |
| 132.5° | 36.1 | 36.1  | 120.4 | 180.5 | 192.6 |
| 135°   | 36.1 | 36.1  | 96.3  | 162.5 | 168.5 |
| 137.5° | 36.1 | 36.1  | 78.2  | 138.4 | 150.5 |
| 140°   | 36.1 | 36.1  | 60.2  | 120.4 | 126.4 |
| 142.5° | 42.1 | 36.1  | 54.2  | 102.3 | 108.3 |
| 145°   | 48.1 | 36.1  | 42.1  | 78.2  | 90.3  |
| 147.5° | 48.1 | 42.1  | 42.1  | 66.2  | 72.2  |
| 150°   | 48.1 | 48.1  | 36.1  | 48.1  | 60.2  |
| 152.5° | 48.1 | 48.1  | 36.1  | 36.1  | 48.1  |
| 155°   | 48.1 | 48.1  | 36.1  | 36.1  | 36.1  |
| 157.5° | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 160°   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 162.5° | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 165°   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 167.5° | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 170°   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 172.5° | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 175°   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 177.5° | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 180°   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |



Report Generated By 670246072 / DESKTOP-50001EG







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







|        |      |       |       |       |       |
|--------|------|-------|-------|-------|-------|
| 107.5° | 30.1 | 186.6 | 505.5 | 607.8 | 619.9 |
| 110°   | 30.1 | 162.5 | 445.3 | 541.6 | 553.7 |



(END OF REPORT)