

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: P830076

Luminaire Tested: **OHBL-24HE-NL-UNV-L935-CD**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P830076  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P472951)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-24HE-NL-UNV-L935-CD  
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 90CRI, 3500K LEDS AND NO LENS  
Light Source: -  
Ballast/Driver: -

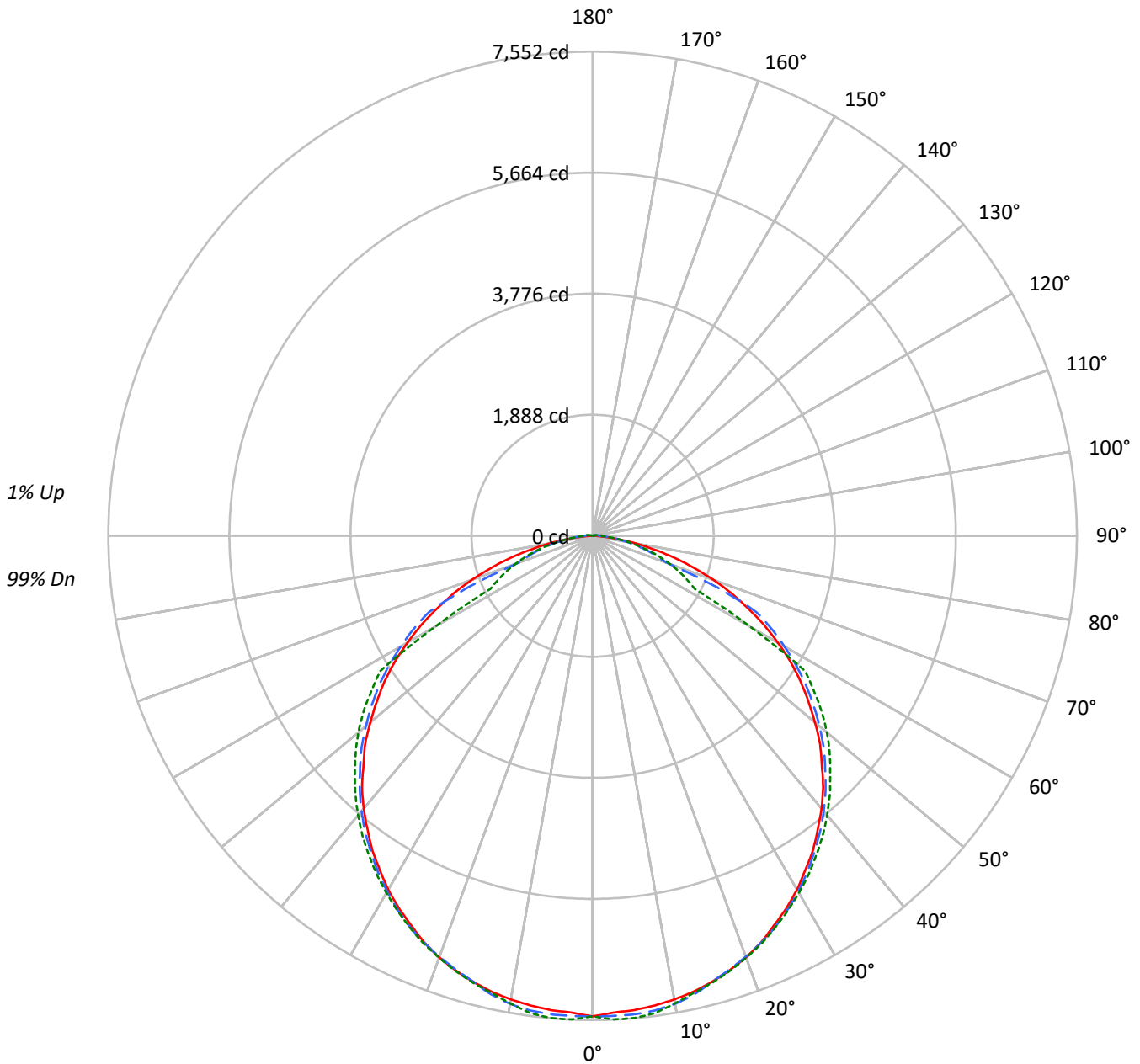
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21047.0 lumens  
Efficiency: N/A  
Efficacy: 158.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39  
Luminous Opening: Rectangular (W 1.8' x L: 3.78' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 133  
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

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### Luminous Intensity Polar Plot





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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 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |    |    |    |   | 99 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 109 | 105 | 100 | 97  | 106 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 91  | 89  | 90  | 88  | 86  |    |    |    |   | 84 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 99  | 92  | 85  | 79  | 97  | 90  | 84  | 78  | 86  | 81  | 76  | 83  | 78  | 75  | 80  | 76  | 73  |    |    |    |   | 71 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 91  | 81  | 73  | 66  | 88  | 79  | 72  | 66  | 76  | 70  | 64  | 73  | 68  | 63  | 70  | 66  | 62  |    |    |    |   | 60 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  |    |    |    |   | 51 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 76  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 60  | 53  | 47  | 58  | 52  | 47  | 57  | 51  | 46  |    |    |    |   | 44 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 71  | 57  | 49  | 42  | 69  | 56  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 51  | 45  | 41  |    |    |    |   | 39 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 65  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  | 48  | 41  | 36  | 47  | 41  | 36  |    |    |    |   | 34 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 61  | 47  | 39  | 33  | 59  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 43  | 37  | 32  |    |    |    |   | 30 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 57  | 43  | 35  | 30  | 55  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 29  | 40  | 34  | 29  |    |    |    |   | 27 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 53  | 40  | 32  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 26  |    |    |    |   | 25 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11855 | 11855 | 11855 |
| 5°  | 11790 | 11897 | 11986 |
| 10° | 11793 | 11905 | 11890 |
| 15° | 11791 | 11789 | 11815 |
| 20° | 11775 | 11757 | 11786 |
| 25° | 11695 | 11754 | 11763 |
| 30° | 11640 | 11700 | 11746 |
| 35° | 11565 | 11628 | 11738 |
| 40° | 11465 | 11574 | 11745 |
| 45° | 11300 | 11470 | 11721 |
| 50° | 11129 | 11356 | 11731 |
| 55° | 10917 | 11200 | 11602 |
| 60° | 10551 | 10925 | 9032  |
| 65° | 9982  | 10563 | 6079  |
| 70° | 9233  | 5607  | 5900  |
| 75° | 8053  | 5329  | 5634  |
| 80° | 6193  | 4888  | 5163  |
| 85° | 3126  | 4941  | 5059  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 712.2   | 3.4       |
| 10°-20°   | 2039.2  | 9.7       |
| 20°-30°   | 3102.8  | 14.7      |
| 30°-40°   | 3772.6  | 17.9      |
| 40°-50°   | 3966.7  | 18.8      |
| 50°-60°   | 3622.0  | 17.2      |
| 60°-70°   | 2321.9  | 11.0      |
| 70°-80°   | 1096.8  | 5.2       |
| 80°-90°   | 304.1   | 1.4       |
| 90°-100°  | 80.6    | 0.4       |
| 100°-110° | 22.0    | 0.1       |
| 110°-120° | 6.1     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-30°    | 5854.1  | 27.8      |
| 0°-40°    | 9626.7  | 45.7      |
| 0°-60°    | 17215.4 | 81.8      |
| 0°-90°    | 20938.3 | 99.5      |
| 90°-120°  | 108.7   | 0.5       |
| 90°-150°  | 108.7   | 0.5       |
| 90°-180°  | 109.0   | 0.5       |
| 0°-180°   | 21047.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 7496 | 7496  | 7496 | 7496  | 7496 |      |
| 5°   | 7427 | 7456  | 7494 | 7535  | 7550 | 706  |
| 15°  | 7202 | 7256  | 7200 | 7211  | 7216 | 2033 |
| 25°  | 6702 | 6712  | 6736 | 6747  | 6741 | 3092 |
| 35°  | 5990 | 5955  | 6023 | 6097  | 6080 | 3744 |
| 45°  | 5052 | 5043  | 5129 | 5250  | 5240 | 3905 |
| 55°  | 3959 | 3929  | 4062 | 4197  | 4208 | 3531 |
| 65°  | 2668 | 2668  | 2823 | 1619  | 1624 | 2645 |
| 75°  | 1318 | 1343  | 872  | 918   | 922  | 1389 |
| 85°  | 172  | 218   | 272  | 295   | 279  | 255  |
| 90°  | 0    | 74    | 121  | 143   | 141  | 8    |
| 95°  | 4    | 38    | 87   | 117   | 117  | 2    |
| 105° | 6    | 14    | 21   | 21    | 20   | 7    |
| 115° | 6    | 9     | 13   | 9     | 1    | 5    |
| 125° | 0    | 0     | 0    | 0     | 0    | 0    |
| 135° | 0    | 0     | 0    | 0     | 0    | 0    |
| 145° | 0    | 0     | 0    | 0     | 0    | 0    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 0     | 0    | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



TEST NUMBER: P830076

CATALOG NUMBER: OHBL-24HE-NL-UNV-L935-CD

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 7496.4 | 7496.4 | 7496.4 | 7496.4 | 7496.4 |
| 2.5°   | 7443.8 | 7468.8 | 7496.4 | 7531.9 | 7551.5 |
| 5°     | 7426.6 | 7455.6 | 7493.8 | 7534.6 | 7550.3 |
| 7.5°   | 7389.9 | 7430.5 | 7467.4 | 7496.4 | 7505.6 |
| 10°    | 7343.8 | 7392.5 | 7413.5 | 7410.9 | 7404.3 |
| 12.5°  | 7281.9 | 7333.3 | 7326.8 | 7296.4 | 7301.7 |
| 15°    | 7201.7 | 7255.6 | 7200.5 | 7210.9 | 7216.2 |
| 17.5°  | 7107.0 | 7159.7 | 7095.2 | 7116.2 | 7117.6 |
| 20°    | 6996.6 | 7036.0 | 6986.0 | 7003.1 | 7003.1 |
| 22.5°  | 6863.7 | 6891.3 | 6870.3 | 6882.1 | 6884.8 |
| 25°    | 6701.9 | 6712.3 | 6736.0 | 6746.6 | 6741.3 |
| 27.5°  | 6546.8 | 6533.5 | 6579.6 | 6604.6 | 6591.3 |
| 30°    | 6374.4 | 6353.3 | 6407.2 | 6448.0 | 6432.3 |
| 32.5°  | 6177.0 | 6163.9 | 6225.8 | 6274.4 | 6265.2 |
| 35°    | 5990.3 | 5954.8 | 6023.1 | 6096.8 | 6079.7 |
| 37.5°  | 5769.3 | 5748.2 | 5825.8 | 5903.5 | 5894.3 |
| 40°    | 5553.5 | 5518.0 | 5606.2 | 5698.2 | 5689.0 |
| 42.5°  | 5322.1 | 5279.9 | 5376.0 | 5486.6 | 5476.0 |
| 45°    | 5052.3 | 5043.1 | 5128.6 | 5249.7 | 5240.5 |
| 47.5°  | 4813.1 | 4767.0 | 4886.6 | 5003.7 | 5014.3 |
| 50°    | 4523.5 | 4506.6 | 4615.7 | 4757.8 | 4768.2 |
| 52.5°  | 4240.8 | 4229.0 | 4343.3 | 4486.8 | 4505.2 |
| 55°    | 3959.3 | 3929.0 | 4061.9 | 4197.4 | 4208.0 |
| 57.5°  | 3658.2 | 3626.6 | 3762.1 | 3909.4 | 3931.7 |
| 60°    | 3335.8 | 3305.6 | 3454.1 | 3591.0 | 2855.7 |
| 62.5°  | 3013.5 | 2992.5 | 3147.8 | 2229.6 | 1796.9 |
| 65°    | 2667.6 | 2667.6 | 2822.7 | 1619.2 | 1624.5 |
| 67.5°  | 2344.1 | 2323.0 | 2104.7 | 1454.7 | 1454.7 |
| 70°    | 1996.8 | 2004.7 | 1212.7 | 1274.7 | 1275.9 |
| 72.5°  | 1648.2 | 1677.1 | 1047.1 | 1097.0 | 1099.6 |
| 75°    | 1318.0 | 1343.1 | 872.1  | 918.2  | 922.1  |
| 77.5°  | 968.2  | 744.5  | 701.1  | 736.7  | 738.0  |
| 80°    | 680.0  | 469.6  | 536.7  | 570.8  | 566.9  |
| 82.5°  | 397.2  | 328.8  | 393.3  | 418.3  | 417.0  |
| 85°    | 172.3  | 218.4  | 272.3  | 294.7  | 278.8  |
| 87.5°  | 55.1   | 135.5  | 169.6  | 182.9  | 181.5  |
| 90°    | 0.0    | 73.7   | 121.0  | 143.3  | 140.8  |
| 92.5°  | 0.0    | 57.8   | 105.3  | 131.6  | 132.9  |
| 95°    | 3.9    | 38.2   | 86.9   | 117.1  | 117.1  |
| 97.5°  | 2.6    | 27.6   | 61.8   | 92.1   | 94.7   |
| 100°   | 2.6    | 22.3   | 40.8   | 65.7   | 67.1   |
| 102.5° | 6.5    | 18.4   | 24.9   | 42.1   | 43.5   |
| 105°   | 6.5    | 14.5   | 21.0   | 21.0   | 19.8   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90° |
|--------|-----|-------|------|-------|-----|
| 112.5° | 7.9 | 10.6  | 14.5 | 10.6  | 1.3 |
| 115°   | 6.5 | 9.2   | 13.1 | 9.2   | 1.3 |
| 117.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 120°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 122.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 125°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 127.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 130°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 132.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 135°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 137.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 140°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 142.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 145°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 147.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 150°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 152.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 155°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0 |
| 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° | 6.5 | 13.1 | 18.4 | 11.8 | 3.9 |
| 110°   | 7.9 | 11.8 | 15.7 | 10.6 | 1.3 |



(END OF REPORT)