

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: P826493

Luminaire Tested: **OHBL-18HE-A-UNV-L830-CD-UPL24**

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P826493  
REPORT IS A COMBINATION OF REPORTS P826227 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-18HE-A-UNV-L830-CD-UPL24  
Description:  
Light Source: -  
Ballast/Driver: -

**Summary**

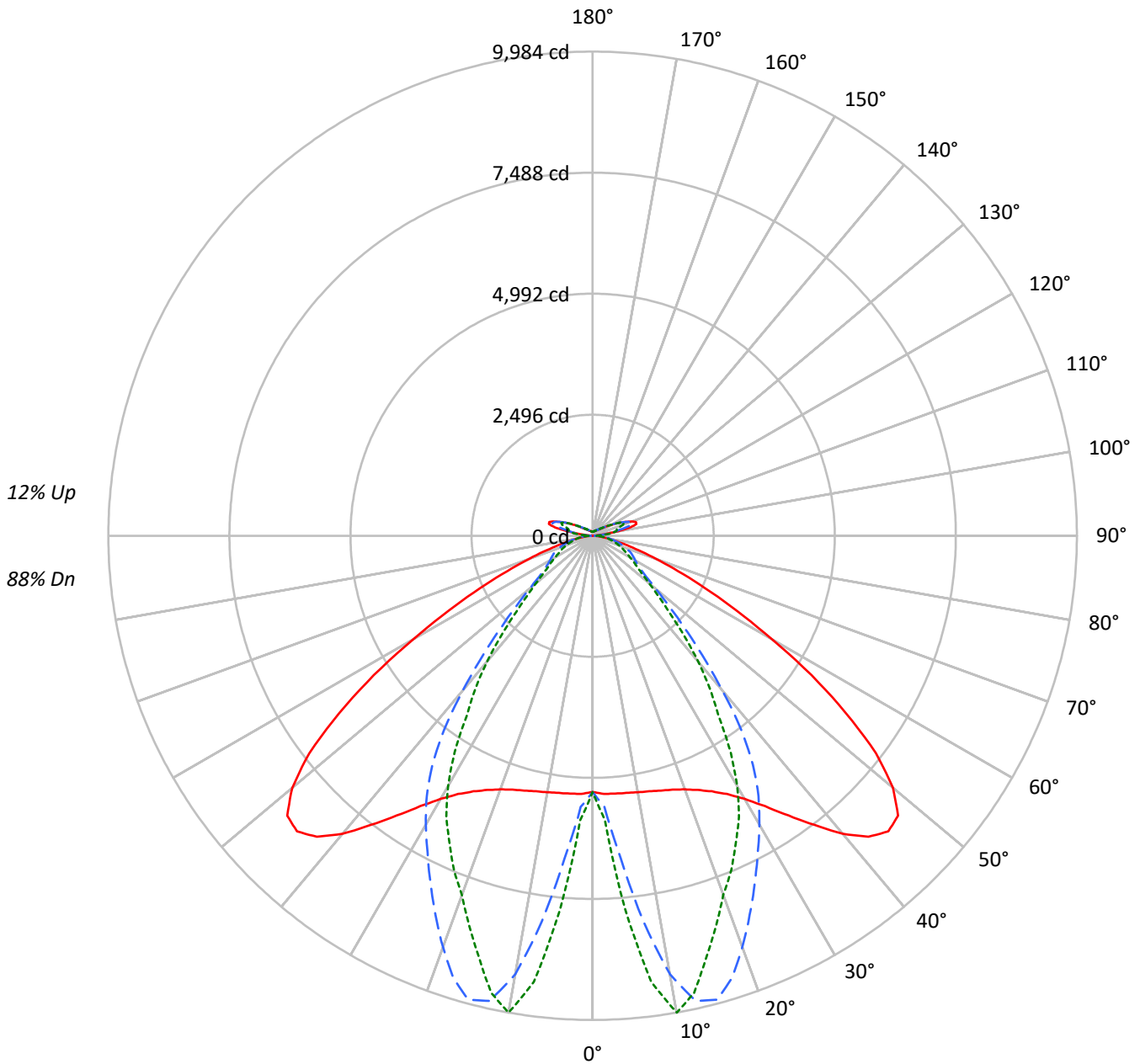
Lumens per Lamp: N/A  
Luminaire Lumens: 19207.0 lumens  
Efficiency: N/A  
Efficacy: 159.5 lumens/watt  
Spacing Criteria (0/90/45): 2.18 / 1.37 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')  
CIE Type: Semi-Direct

Input Watts (W): 120.4  
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

TEST NUMBER: P826493

CATALOG NUMBER: OHBL-18HE-A-UNV-L830-CD-UPL24

### Luminous Intensity Polar Plot





TEST NUMBER: P826493

CATALOG NUMBER: OHBL-18HE-A-UNV-L830-CD-UPL24

**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   | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 91 | 91 | 91 | 88 |    |    |   | 88 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 108 | 104 | 100 | 97  | 104 | 100 | 97  | 94  | 94  | 92  | 89  | 88 | 86 | 85 | 83 | 81 | 80 | 77 |    |    |   | 77 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 100 | 93  | 87  | 82  | 96  | 90  | 85  | 80  | 85  | 80  | 77  | 80 | 76 | 73 | 75 | 72 | 70 | 67 |    |    |   | 67 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 92  | 83  | 76  | 71  | 89  | 81  | 74  | 69  | 76  | 71  | 67  | 72 | 68 | 64 | 68 | 65 | 62 | 59 |    |    |   | 59 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 85  | 75  | 67  | 61  | 82  | 73  | 66  | 60  | 69  | 63  | 58  | 65 | 60 | 56 | 62 | 58 | 55 | 52 |    |    |   | 52 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 79  | 68  | 60  | 54  | 76  | 66  | 59  | 53  | 63  | 56  | 52  | 60 | 54 | 50 | 57 | 52 | 49 | 46 |    |    |   | 46 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 73  | 62  | 54  | 48  | 71  | 60  | 53  | 47  | 57  | 51  | 46  | 55 | 49 | 45 | 52 | 47 | 44 | 42 |    |    |   | 42 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 68  | 56  | 49  | 43  | 66  | 55  | 48  | 43  | 53  | 46  | 42  | 50 | 45 | 40 | 48 | 43 | 39 | 37 |    |    |   | 37 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 64  | 52  | 44  | 39  | 62  | 51  | 43  | 38  | 48  | 42  | 38  | 46 | 41 | 37 | 44 | 40 | 36 | 34 |    |    |   | 34 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 60  | 48  | 40  | 35  | 58  | 47  | 40  | 35  | 45  | 39  | 34  | 43 | 37 | 33 | 41 | 36 | 33 | 31 |    |    |   | 31 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 56  | 44  | 37  | 32  | 55  | 43  | 37  | 32  | 42  | 36  | 31  | 40 | 35 | 31 | 39 | 34 | 30 | 28 |    |    |   | 28 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 9024  | 9024  | 9024  |
| 5°  | 9070  | 11350 | 13229 |
| 10° | 9151  | 15648 | 17183 |
| 15° | 9369  | 17046 | 15771 |
| 20° | 9756  | 15817 | 14094 |
| 25° | 10468 | 14225 | 12892 |
| 30° | 11673 | 12808 | 11464 |
| 35° | 13722 | 11210 | 9135  |
| 40° | 16500 | 8537  | 7270  |
| 45° | 18927 | 5816  | 5175  |
| 50° | 19188 | 3990  | 3827  |
| 55° | 16609 | 3140  | 3127  |
| 60° | 12406 | 2938  | 2813  |
| 65° | 8504  | 2947  | 2664  |
| 70° | 5437  | 2843  | 2581  |
| 75° | 3270  | 2631  | 2469  |
| 80° | 1924  | 2312  | 2547  |
| 85° | 925   | 1985  | 2362  |



TEST NUMBER: P826493

CATALOG NUMBER: OHBL-18HE-A-UNV-L830-CD-UPL24

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 689.8   | 3.6       |
| 10°-20°   | 2434.5  | 12.7      |
| 20°-30°   | 3587.4  | 18.7      |
| 30°-40°   | 3769.8  | 19.6      |
| 40°-50°   | 2884.6  | 15.0      |
| 50°-60°   | 1741.9  | 9.1       |
| 60°-70°   | 1062.9  | 5.5       |
| 70°-80°   | 580.2   | 3.0       |
| 80°-90°   | 209.4   | 1.1       |
| 90°-100°  | 215.8   | 1.1       |
| 100°-110° | 749.0   | 3.9       |
| 110°-120° | 642.5   | 3.3       |
| 120°-130° | 308.2   | 1.6       |
| 130°-140° | 154.2   | 0.8       |
| 140°-150° | 89.4    | 0.5       |
| 150°-160° | 52.1    | 0.3       |
| 160°-170° | 27.0    | 0.1       |
| 170°-180° | 8.2     | 0.0       |
| 0°-30°    | 6711.7  | 34.9      |
| 0°-40°    | 10481.6 | 54.6      |
| 0°-60°    | 15108.0 | 78.7      |
| 0°-90°    | 16960.5 | 88.3      |
| 90°-120°  | 1607.3  | 8.4       |
| 90°-150°  | 2159.2  | 11.2      |
| 90°-180°  | 2246.0  | 11.7      |
| 0°-180°   | 19207.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 5284 | 5284  | 5284 | 5284  | 5284 |      |
| 5°   | 5337 | 5725  | 6679 | 7458  | 7746 | 510  |
| 15°  | 5441 | 8474  | 9904 | 9241  | 9024 | 1547 |
| 25°  | 5814 | 9835  | 7907 | 7158  | 6982 | 2717 |
| 35°  | 7042 | 7876  | 5760 | 4797  | 4516 | 4467 |
| 45°  | 8619 | 4494  | 2653 | 2335  | 2237 | 6512 |
| 55°  | 6374 | 1524  | 1208 | 1120  | 1116 | 5633 |
| 65°  | 2556 | 965   | 889  | 760   | 722  | 2618 |
| 75°  | 680  | 600   | 550  | 454   | 436  | 783  |
| 85°  | 101  | 186   | 219  | 200   | 181  | 125  |
| 90°  | 5    | 32    | 44   | 58    | 64   | 9    |
| 95°  | 49   | 103   | 160  | 212   | 240  | 153  |
| 105° | 933  | 923   | 785  | 559   | 514  | 886  |
| 115° | 644  | 650   | 650  | 649   | 643  | 649  |
| 125° | 314  | 331   | 338  | 337   | 334  | 295  |
| 135° | 186  | 190   | 196  | 198   | 200  | 147  |
| 145° | 135  | 139   | 141  | 142   | 143  | 86   |
| 155° | 108  | 110   | 112  | 113   | 113  | 51   |
| 165° | 93   | 94    | 95   | 95    | 95   | 27   |
| 175° | 84   | 85    | 85   | 86    | 86   | 8    |
| 180° | 84   | 84    | 84   | 84    | 84   |      |



TEST NUMBER: P826493

CATALOG NUMBER: OHBL-18HE-A-UNV-L830-CD-UPL24

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 5283.5 | 5283.5 | 5283.5 | 5283.5 | 5283.5 |
| 2.5°   | 5326.9 | 5381.2 | 5595.5 | 5818.0 | 5872.2 |
| 5°     | 5336.6 | 5725.3 | 6679.0 | 7457.7 | 7745.5 |
| 7.5°   | 5347.9 | 6282.9 | 8021.4 | 8974.7 | 9280.0 |
| 10°    | 5369.4 | 6988.0 | 9184.6 | 9869.0 | 9984.4 |
| 12.5°  | 5396.2 | 7735.1 | 9824.6 | 9799.7 | 9654.2 |
| 15°    | 5440.6 | 8473.8 | 9903.5 | 9241.4 | 9024.2 |
| 17.5°  | 5487.2 | 9099.0 | 9559.6 | 8633.8 | 8444.6 |
| 20°    | 5563.1 | 9562.9 | 9024.6 | 8093.7 | 7878.6 |
| 22.5°  | 5672.6 | 9818.1 | 8463.7 | 7605.2 | 7464.9 |
| 25°    | 5813.7 | 9834.6 | 7906.6 | 7158.2 | 6981.5 |
| 27.5°  | 6002.9 | 9606.5 | 7372.5 | 6720.2 | 6533.5 |
| 30°    | 6260.3 | 9169.6 | 6876.3 | 6192.1 | 5960.6 |
| 32.5°  | 6609.9 | 8540.9 | 6364.7 | 5554.5 | 5294.9 |
| 35°    | 7042.2 | 7875.7 | 5760.0 | 4796.9 | 4516.4 |
| 37.5°  | 7513.9 | 7137.1 | 5026.2 | 4126.0 | 3962.7 |
| 40°    | 8021.4 | 6376.1 | 4156.4 | 3498.2 | 3381.3 |
| 42.5°  | 8417.4 | 5548.6 | 3348.4 | 2907.1 | 2782.7 |
| 45°    | 8619.3 | 4493.9 | 2653.3 | 2334.8 | 2236.7 |
| 47.5°  | 8540.6 | 3488.5 | 2103.4 | 1855.2 | 1825.7 |
| 50°    | 8081.9 | 2575.9 | 1683.8 | 1528.2 | 1516.0 |
| 52.5°  | 7364.6 | 1919.9 | 1390.9 | 1294.6 | 1273.6 |
| 55°    | 6374.2 | 1523.9 | 1207.9 | 1119.5 | 1116.1 |
| 57.5°  | 5351.7 | 1294.6 | 1096.4 | 1027.9 | 1004.2 |
| 60°    | 4261.0 | 1154.4 | 1011.9 | 934.6  | 886.4  |
| 62.5°  | 3340.0 | 1056.3 | 949.7  | 844.9  | 799.8  |
| 65°    | 2555.5 | 964.7  | 888.6  | 760.4  | 721.6  |
| 67.5°  | 1904.9 | 877.5  | 813.9  | 671.6  | 648.9  |
| 70°    | 1387.9 | 788.0  | 728.6  | 597.2  | 579.4  |
| 72.5°  | 989.2  | 698.8  | 643.5  | 527.4  | 507.7  |
| 75°    | 680.4  | 599.9  | 550.3  | 454.0  | 435.7  |
| 77.5°  | 459.0  | 499.2  | 458.6  | 387.7  | 379.9  |
| 80°    | 306.5  | 395.9  | 370.9  | 328.5  | 323.7  |
| 82.5°  | 186.0  | 287.3  | 292.8  | 267.2  | 254.2  |
| 85°    | 101.2  | 186.0  | 219.3  | 199.8  | 181.3  |
| 87.5°  | 39.6   | 103.1  | 151.1  | 135.7  | 127.8  |
| 90°    | 4.7    | 31.6   | 43.7   | 57.7   | 64.2   |
| 92.5°  | 15.8   | 41.9   | 67.0   | 94.9   | 107.0  |
| 95°    | 49.3   | 103.3  | 160.1  | 212.2  | 240.1  |
| 97.5°  | 250.3  | 270.8  | 291.3  | 352.7  | 383.4  |
| 100°   | 513.7  | 545.3  | 440.2  | 465.3  | 473.7  |
| 102.5° | 793.8  | 789.1  | 575.1  | 515.5  | 508.1  |
| 105°   | 933.3  | 923.1  | 785.4  | 559.3  | 513.7  |



TEST NUMBER: P826493

CATALOG NUMBER: OHBL-18HE-A-UNV-L830-CD-UPL24

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 751.9 | 763.1 | 748.2 | 726.8 | 697.0 |
| 115°   | 643.9 | 650.5 | 650.5 | 648.6 | 643.0 |
| 117.5° | 550.9 | 551.8 | 555.5 | 554.6 | 555.5 |
| 120°   | 456.0 | 466.2 | 474.6 | 469.9 | 464.3 |
| 122.5° | 382.5 | 393.6 | 399.2 | 397.3 | 391.8 |
| 125°   | 314.5 | 331.3 | 337.8 | 336.9 | 334.1 |
| 127.5° | 266.1 | 278.2 | 287.5 | 288.5 | 287.5 |
| 130°   | 231.7 | 239.2 | 248.5 | 249.4 | 250.3 |
| 132.5° | 205.7 | 212.2 | 218.7 | 222.4 | 221.5 |
| 135°   | 186.1 | 189.8 | 196.3 | 198.2 | 200.1 |
| 137.5° | 170.3 | 173.1 | 178.7 | 181.5 | 181.5 |
| 140°   | 156.3 | 160.1 | 164.7 | 166.6 | 167.5 |
| 142.5° | 144.2 | 148.0 | 151.7 | 153.5 | 153.5 |
| 145°   | 134.9 | 138.7 | 141.4 | 142.4 | 143.3 |
| 147.5° | 126.6 | 130.3 | 132.1 | 134.0 | 134.0 |
| 150°   | 120.0 | 121.9 | 124.7 | 125.6 | 126.6 |
| 152.5° | 113.5 | 115.4 | 118.2 | 119.1 | 119.1 |
| 155°   | 107.9 | 109.8 | 111.7 | 112.6 | 112.6 |
| 157.5° | 103.3 | 105.2 | 107.0 | 107.9 | 107.9 |
| 160°   | 99.6  | 100.5 | 102.4 | 103.3 | 103.3 |
| 162.5° | 95.8  | 96.8  | 97.7  | 98.6  | 98.6  |
| 165°   | 93.1  | 94.0  | 94.9  | 94.9  | 94.9  |
| 167.5° | 90.3  | 90.3  | 91.2  | 92.1  | 92.1  |
| 170°   | 87.5  | 88.4  | 88.4  | 89.3  | 89.3  |
| 172.5° | 85.6  | 86.5  | 86.5  | 86.5  | 87.5  |
| 175°   | 83.8  | 84.7  | 84.7  | 85.6  | 85.6  |
| 177.5° | 83.8  | 83.8  | 83.8  | 83.8  | 83.8  |
| 180°   | 83.8  | 83.8  | 83.8  | 83.8  | 83.8  |



Report Generated By 670246072 / DESKTOP-50001EG







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







|        |       |       |       |       |       |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 937.1 | 940.8 | 868.2 | 678.4 | 564.8 |
| 110°   | 864.5 | 872.9 | 831.0 | 759.3 | 668.1 |



(END OF REPORT)