

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: P828651

Luminaire Tested: **OHBL-24SE-MFL-UNV-L950-CD-UPL12**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P828651  
REPORT IS A COMBINATION OF REPORTS P826079 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-24SE-MFL-UNV-L950-CD-UPL12  
Description:  
Light Source: -  
Ballast/Driver: -

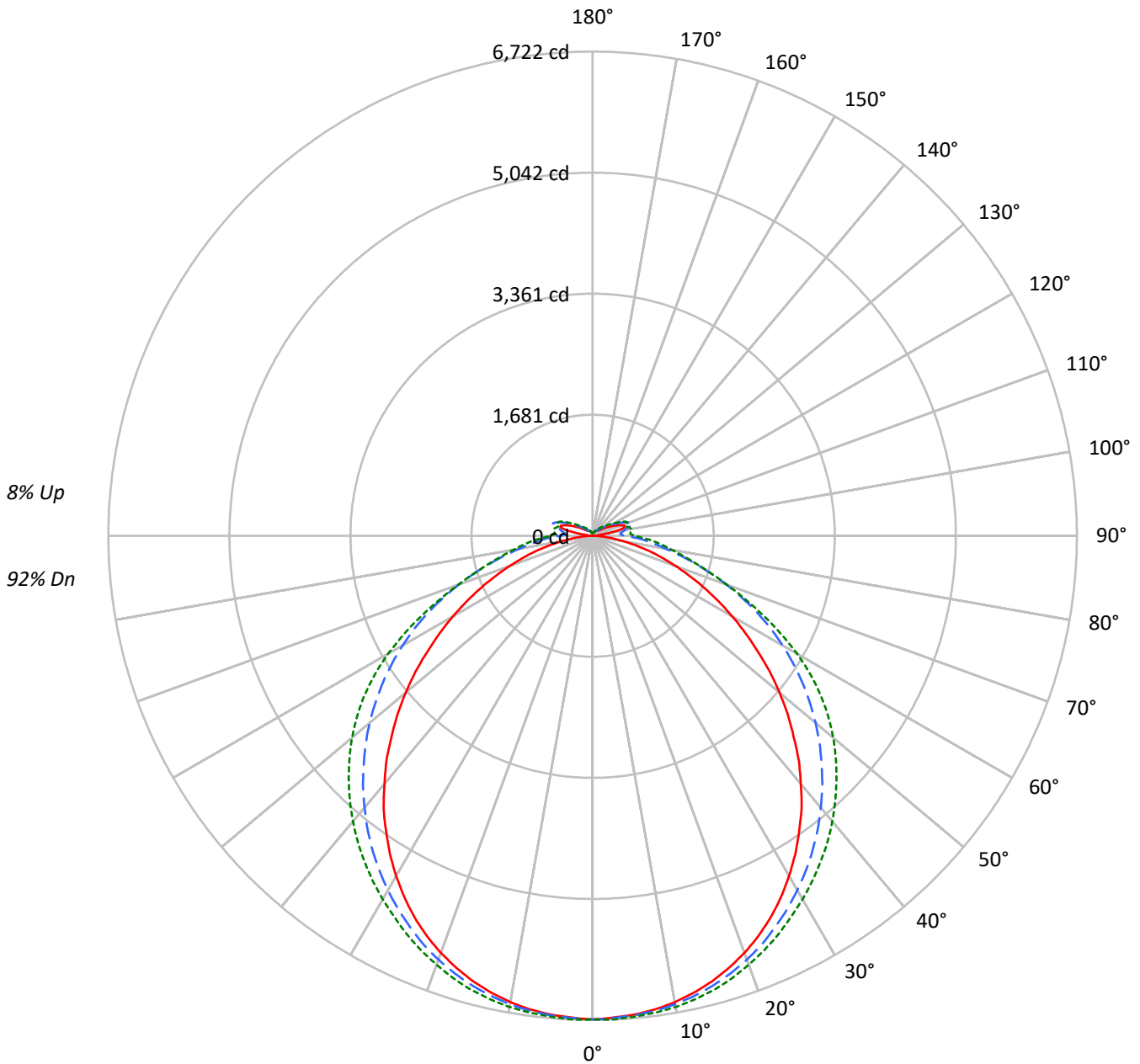
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21180.8 lumens  
Efficiency: N/A  
Efficacy: 144.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 146.4  
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   | 117 | 117 | 117 | 117 | 113 | 113 | 113 | 113 | 107 | 107 | 107 | 100 | 100 | 100 | 95 | 95 | 95 | 92 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 106 | 101 | 97  | 93  | 103 | 98  | 94  | 91  | 92  | 89  | 86  | 87  | 85  | 82  | 82 | 80 | 78 | 76 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 97  | 88  | 81  | 75  | 93  | 86  | 79  | 74  | 81  | 75  | 71  | 76  | 72  | 68  | 72 | 68 | 65 | 63 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 88  | 77  | 69  | 63  | 85  | 75  | 68  | 61  | 71  | 65  | 59  | 67  | 62  | 57  | 64 | 59 | 55 | 53 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 80  | 68  | 60  | 53  | 78  | 67  | 58  | 52  | 63  | 56  | 50  | 60  | 54  | 49  | 57 | 52 | 47 | 45 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 74  | 61  | 52  | 45  | 71  | 59  | 51  | 45  | 56  | 49  | 44  | 54  | 47  | 42  | 51 | 46 | 41 | 39 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 68  | 55  | 46  | 40  | 66  | 54  | 45  | 39  | 51  | 44  | 38  | 48  | 42  | 37  | 46 | 41 | 36 | 34 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 63  | 50  | 41  | 35  | 61  | 49  | 40  | 34  | 46  | 39  | 34  | 44  | 38  | 33  | 42 | 36 | 32 | 30 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 59  | 45  | 37  | 31  | 57  | 44  | 36  | 31  | 42  | 35  | 30  | 40  | 34  | 29  | 39 | 33 | 29 | 27 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 55  | 42  | 33  | 28  | 53  | 41  | 33  | 28  | 39  | 32  | 27  | 37  | 31  | 26  | 36 | 30 | 26 | 24 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 51  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 36  | 29  | 25  | 35  | 28  | 24  | 33 | 28 | 24 | 22 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11470 | 11470 | 11470 |
| 5°  | 11341 | 11356 | 11444 |
| 10° | 11207 | 11251 | 11433 |
| 15° | 11027 | 11126 | 11403 |
| 20° | 10806 | 10974 | 11337 |
| 25° | 10529 | 10786 | 11272 |
| 30° | 10168 | 10583 | 11209 |
| 35° | 9742  | 10367 | 11166 |
| 40° | 9243  | 10117 | 11131 |
| 45° | 8665  | 9846  | 11076 |
| 50° | 8038  | 9572  | 11003 |
| 55° | 7284  | 9237  | 10834 |
| 60° | 6513  | 8842  | 10406 |
| 65° | 5677  | 8340  | 9637  |
| 70° | 4777  | 7701  | 8814  |
| 75° | 3862  | 6962  | 8382  |
| 80° | 2754  | 6413  | 8781  |
| 85° | 1532  | 6606  | 11008 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 636.3   | 3.0       |
| 10°-20°   | 1825.5  | 8.6       |
| 20°-30°   | 2760.8  | 13.0      |
| 30°-40°   | 3314.3  | 15.6      |
| 40°-50°   | 3423.2  | 16.2      |
| 50°-60°   | 3079.8  | 14.5      |
| 60°-70°   | 2319.9  | 11.0      |
| 70°-80°   | 1400.9  | 6.6       |
| 80°-90°   | 687.9   | 3.2       |
| 90°-100°  | 391.8   | 1.8       |
| 100°-110° | 524.5   | 2.5       |
| 110°-120° | 405.7   | 1.9       |
| 120°-130° | 202.8   | 1.0       |
| 130°-140° | 102.9   | 0.5       |
| 140°-150° | 57.1    | 0.3       |
| 150°-160° | 30.4    | 0.1       |
| 160°-170° | 13.1    | 0.1       |
| 170°-180° | 4.0     | 0.0       |
| 0°-30°    | 5222.6  | 24.7      |
| 0°-40°    | 8536.9  | 40.3      |
| 0°-60°    | 15039.9 | 71.0      |
| 0°-90°    | 19448.5 | 91.8      |
| 90°-120°  | 1322.1  | 6.2       |
| 90°-150°  | 1684.9  | 8.0       |
| 90°-180°  | 1732.0  | 8.2       |
| 0°-180°   | 21180.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 6715 | 6715  | 6715 | 6715  | 6715 |      |
| 5°   | 6673 | 6691  | 6683 | 6709  | 6701 | 634  |
| 15°  | 6403 | 6434  | 6464 | 6518  | 6525 | 1805 |
| 25°  | 5848 | 5912  | 5996 | 6089  | 6104 | 2690 |
| 35°  | 5000 | 5116  | 5327 | 5488  | 5520 | 3125 |
| 45°  | 3946 | 4145  | 4492 | 4737  | 4788 | 3046 |
| 55°  | 2796 | 3085  | 3553 | 3821  | 3867 | 2506 |
| 65°  | 1706 | 2054  | 2515 | 2640  | 2610 | 1695 |
| 75°  | 804  | 1154  | 1456 | 1494  | 1479 | 857  |
| 85°  | 168  | 442   | 730  | 830   | 845  | 194  |
| 90°  | 3    | 188   | 438  | 553   | 578  | 12   |
| 95°  | 30   | 167   | 387  | 499   | 529  | 78   |
| 105° | 461  | 512   | 560  | 505   | 493  | 437  |
| 115° | 326  | 351   | 426  | 461   | 462  | 326  |
| 125° | 166  | 177   | 230  | 258   | 264  | 154  |
| 135° | 100  | 106   | 129  | 155   | 161  | 80   |
| 145° | 82   | 82    | 84   | 98    | 104  | 51   |
| 155° | 69   | 71    | 70   | 70    | 71   | 29   |
| 165° | 45   | 45    | 46   | 46    | 46   | 13   |
| 175° | 41   | 41    | 41   | 41    | 41   | 4    |
| 180° | 40   | 40    | 40   | 40    | 40   |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 6715.4 | 6715.4 | 6715.4 | 6715.4 | 6715.4 |
| 2.5°   | 6695.7 | 6712.1 | 6702.3 | 6723.6 | 6722.0 |
| 5°     | 6672.6 | 6690.7 | 6682.6 | 6708.8 | 6700.6 |
| 7.5°   | 6633.3 | 6653.0 | 6651.3 | 6680.9 | 6677.6 |
| 10°    | 6575.7 | 6597.1 | 6603.7 | 6643.1 | 6643.1 |
| 12.5°  | 6496.8 | 6524.7 | 6541.2 | 6588.8 | 6590.5 |
| 15°    | 6403.1 | 6434.3 | 6464.0 | 6518.2 | 6524.7 |
| 17.5°  | 6289.7 | 6329.2 | 6370.2 | 6432.8 | 6440.9 |
| 20°    | 6161.6 | 6205.9 | 6261.8 | 6327.6 | 6337.4 |
| 22.5°  | 6013.6 | 6066.2 | 6138.5 | 6215.7 | 6227.3 |
| 25°    | 5847.6 | 5911.7 | 5995.5 | 6089.2 | 6104.0 |
| 27.5°  | 5658.6 | 5732.6 | 5846.0 | 5951.2 | 5964.3 |
| 30°    | 5453.2 | 5540.3 | 5681.6 | 5806.6 | 5827.9 |
| 32.5°  | 5236.2 | 5336.5 | 5510.7 | 5650.4 | 5680.0 |
| 35°    | 4999.6 | 5116.2 | 5326.7 | 5487.7 | 5520.5 |
| 37.5°  | 4766.2 | 4894.4 | 5132.7 | 5316.7 | 5356.2 |
| 40°    | 4493.4 | 4652.8 | 4925.6 | 5129.4 | 5177.1 |
| 42.5°  | 4237.0 | 4409.6 | 4718.6 | 4940.4 | 4986.4 |
| 45°    | 3946.1 | 4145.0 | 4491.7 | 4736.6 | 4787.6 |
| 47.5°  | 3673.2 | 3888.6 | 4273.1 | 4526.2 | 4578.8 |
| 50°    | 3385.6 | 3622.3 | 4039.8 | 4304.4 | 4358.6 |
| 52.5°  | 3098.0 | 3352.8 | 3798.2 | 4072.7 | 4123.6 |
| 55°    | 2795.6 | 3084.9 | 3553.2 | 3821.2 | 3867.2 |
| 57.5°  | 2514.6 | 2820.3 | 3301.8 | 3556.5 | 3584.5 |
| 60°    | 2236.8 | 2554.0 | 3045.4 | 3268.9 | 3278.8 |
| 62.5°  | 1965.6 | 2299.2 | 2782.5 | 2959.9 | 2946.8 |
| 65°    | 1705.9 | 2054.4 | 2514.6 | 2639.5 | 2609.9 |
| 67.5°  | 1456.1 | 1816.1 | 2240.1 | 2320.6 | 2281.2 |
| 70°    | 1219.5 | 1584.4 | 1973.9 | 2014.9 | 1978.8 |
| 72.5°  | 1010.7 | 1364.2 | 1704.3 | 1738.8 | 1712.5 |
| 75°    | 803.7  | 1153.8 | 1456.1 | 1494.0 | 1479.2 |
| 77.5°  | 609.7  | 950.0  | 1227.7 | 1277.0 | 1280.3 |
| 80°    | 438.8  | 764.2  | 1028.8 | 1106.1 | 1115.9 |
| 82.5°  | 289.3  | 593.3  | 862.8  | 961.4  | 976.2  |
| 85°    | 167.6  | 442.1  | 729.7  | 830.0  | 844.8  |
| 87.5°  | 72.3   | 318.8  | 586.7  | 677.1  | 695.2  |
| 90°    | 2.6    | 188.2  | 438.3  | 552.9  | 577.7  |
| 92.5°  | 12.8   | 163.0  | 391.3  | 503.8  | 526.3  |
| 95°    | 30.0   | 167.1  | 387.1  | 498.6  | 529.1  |
| 97.5°  | 127.2  | 226.4  | 415.5  | 517.2  | 540.7  |
| 100°   | 249.8  | 343.7  | 449.8  | 528.4  | 545.8  |
| 102.5° | 391.5  | 452.1  | 480.2  | 514.9  | 522.1  |
| 105°   | 461.0  | 511.7  | 559.8  | 505.3  | 493.4  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 376.6 | 410.4 | 488.4 | 517.1 | 509.0 |
| 115°   | 326.1 | 350.8 | 425.6 | 460.8 | 462.2 |
| 117.5° | 277.4 | 298.9 | 367.3 | 400.8 | 404.0 |
| 120°   | 234.8 | 253.1 | 314.0 | 343.4 | 350.0 |
| 122.5° | 200.0 | 212.6 | 269.4 | 298.0 | 303.8 |
| 125°   | 166.2 | 177.2 | 230.0 | 257.8 | 263.6 |
| 127.5° | 139.3 | 147.8 | 196.7 | 225.4 | 230.3 |
| 130°   | 122.8 | 127.9 | 168.4 | 197.2 | 202.1 |
| 132.5° | 110.6 | 116.5 | 146.3 | 173.5 | 180.9 |
| 135°   | 100.2 | 106.1 | 129.3 | 154.8 | 161.4 |
| 137.5° | 93.2  | 98.2  | 114.0 | 137.9 | 145.4 |
| 140°   | 87.9  | 92.2  | 102.2 | 122.7 | 129.3 |
| 142.5° | 84.3  | 86.1  | 91.1  | 110.1 | 115.9 |
| 145°   | 81.6  | 81.7  | 84.2  | 98.2  | 104.1 |
| 147.5° | 77.3  | 79.0  | 80.8  | 87.4  | 93.1  |
| 150°   | 74.7  | 77.2  | 76.4  | 78.9  | 83.9  |
| 152.5° | 71.2  | 73.7  | 72.9  | 72.2  | 75.5  |
| 155°   | 68.6  | 71.1  | 70.3  | 69.6  | 71.2  |
| 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° | 463.6 | 513.1 | 577.7 | 534.7 | 487.2 |
| 110°   | 425.3 | 472.5 | 542.2 | 552.5 | 516.4 |



(END OF REPORT)