

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1588380

Luminaire Tested: 24CZSP-57-L850-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1588380  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 24CZSP-57-L850-S  
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 5000 lumens, 80CRI, Smooth Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

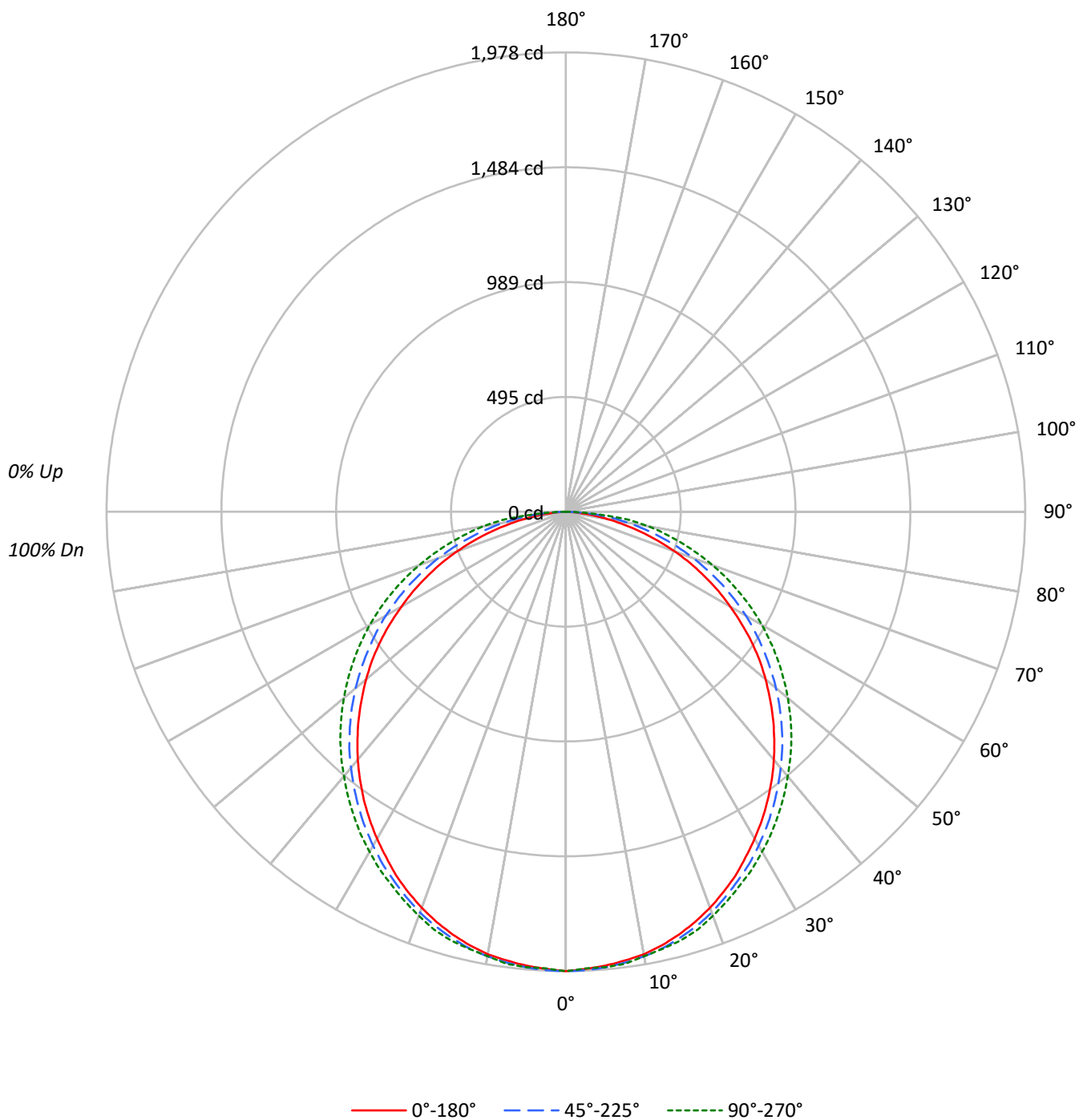
Lumens per Lamp: N/A  
Luminaire Lumens: 5775.0 lumens  
Efficiency: N/A  
Efficacy: 141.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 40.9  
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: 24 FT

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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |     |     |     |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |     |     | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 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 | 100 |
| 1   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 88  |  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  | 74  | 71  | 69  |
| 3   | 89  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 61  |  | 69  | 64  | 60  | 57  |
| 4   | 82  | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 52  |  | 63  | 57  | 52  |  | 61  | 56  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  |  | 57  | 50  | 45  |  | 55  | 49  | 44  | 42  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  |  | 51  | 44  | 39  |  | 50  | 44  | 39  | 37  |
| 7   | 64  | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  |  | 47  | 40  | 35  |  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  |  | 37  | 30  | 25  |  | 36  | 30  | 25  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3030 | 3030 | 3030 |
| 5°  | 3016 | 3028 | 3026 |
| 10° | 3009 | 3023 | 3021 |
| 15° | 2988 | 3012 | 3030 |
| 20° | 2958 | 2993 | 3018 |
| 25° | 2921 | 2962 | 2998 |
| 30° | 2875 | 2936 | 2990 |
| 35° | 2834 | 2907 | 2981 |
| 40° | 2787 | 2878 | 2972 |
| 45° | 2734 | 2849 | 2975 |
| 50° | 2675 | 2814 | 2974 |
| 55° | 2605 | 2775 | 2978 |
| 60° | 2508 | 2744 | 2985 |
| 65° | 2393 | 2691 | 2994 |
| 70° | 2230 | 2616 | 3008 |
| 75° | 1987 | 2512 | 3037 |
| 80° | 1643 | 2392 | 3186 |
| 85° | 1068 | 2160 | 2784 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3287 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 187.1  | 3.2       |
| 10°-20°   | 535.7  | 9.3       |
| 20°-30°   | 807.9  | 14.0      |
| 30°-40°   | 973.1  | 16.8      |
| 40°-50°   | 1016.2 | 17.6      |
| 50°-60°   | 933.3  | 16.2      |
| 60°-70°   | 735.1  | 12.7      |
| 70°-80°   | 451.0  | 7.8       |
| 80°-90°   | 135.7  | 2.4       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 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°    | 1530.6 | 26.5      |
| 0°-40°    | 2503.7 | 43.4      |
| 0°-60°    | 4453.2 | 77.1      |
| 0°-90°    | 5775.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5775.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1978 | 1978  | 1978 | 1978  | 1978 |      |
| 5°  | 1962 | 1964  | 1969 | 1976  | 1968 | 186  |
| 15° | 1884 | 1888  | 1900 | 1911  | 1911 | 531  |
| 25° | 1728 | 1732  | 1752 | 1774  | 1774 | 796  |
| 35° | 1516 | 1523  | 1555 | 1586  | 1594 | 948  |
| 45° | 1262 | 1276  | 1315 | 1361  | 1374 | 973  |
| 55° | 976  | 994   | 1039 | 1097  | 1115 | 871  |
| 65° | 660  | 683   | 743  | 805   | 826  | 653  |
| 75° | 336  | 362   | 424  | 492   | 513  | 356  |
| 85° | 61   | 84    | 123  | 156   | 158  | 79   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1978.1 | 1978.1 | 1978.1 | 1978.1 | 1978.1 |
| 2.5°  | 1970.5 | 1974.3 | 1975.6 | 1976.8 | 1968.0 |
| 5°    | 1961.6 | 1964.2 | 1969.2 | 1975.6 | 1968.0 |
| 7.5°  | 1948.9 | 1951.5 | 1957.8 | 1966.7 | 1962.9 |
| 10°   | 1935.0 | 1936.3 | 1943.9 | 1950.2 | 1942.6 |
| 12.5° | 1912.2 | 1916.0 | 1924.9 | 1929.9 | 1927.4 |
| 15°   | 1884.3 | 1888.1 | 1899.5 | 1910.9 | 1910.9 |
| 17.5° | 1851.4 | 1856.4 | 1870.4 | 1885.6 | 1886.9 |
| 20°   | 1814.6 | 1818.4 | 1836.2 | 1851.4 | 1851.4 |
| 22.5° | 1772.8 | 1777.9 | 1795.6 | 1812.1 | 1814.6 |
| 25°   | 1728.5 | 1732.3 | 1752.5 | 1774.1 | 1774.1 |
| 27.5° | 1676.5 | 1684.1 | 1709.4 | 1731.0 | 1736.1 |
| 30°   | 1625.8 | 1632.1 | 1660.0 | 1686.6 | 1690.4 |
| 32.5° | 1572.6 | 1580.2 | 1609.3 | 1638.5 | 1644.8 |
| 35°   | 1515.6 | 1523.2 | 1554.8 | 1586.5 | 1594.1 |
| 37.5° | 1456.0 | 1464.9 | 1497.8 | 1534.6 | 1542.2 |
| 40°   | 1393.9 | 1404.1 | 1439.5 | 1478.8 | 1486.4 |
| 42.5° | 1328.0 | 1342.0 | 1380.0 | 1420.5 | 1431.9 |
| 45°   | 1262.1 | 1276.1 | 1315.3 | 1361.0 | 1373.6 |
| 47.5° | 1192.4 | 1208.9 | 1249.5 | 1297.6 | 1311.5 |
| 50°   | 1122.7 | 1139.2 | 1181.0 | 1233.0 | 1248.2 |
| 52.5° | 1051.8 | 1068.2 | 1111.3 | 1165.8 | 1182.3 |
| 55°   | 975.7  | 993.5  | 1039.1 | 1097.4 | 1115.1 |
| 57.5° | 897.2  | 920.0  | 968.1  | 1027.7 | 1045.4 |
| 60°   | 818.6  | 841.4  | 895.9  | 954.2  | 974.5  |
| 62.5° | 741.3  | 762.9  | 818.6  | 880.7  | 902.2  |
| 65°   | 660.2  | 683.0  | 742.6  | 804.7  | 826.2  |
| 67.5° | 580.4  | 603.2  | 662.7  | 727.4  | 750.2  |
| 70°   | 498.0  | 523.4  | 584.2  | 648.8  | 671.6  |
| 72.5° | 415.6  | 442.3  | 504.3  | 570.2  | 591.8  |
| 75°   | 335.8  | 362.4  | 424.5  | 491.7  | 513.2  |
| 77.5° | 257.2  | 286.4  | 347.2  | 415.6  | 435.9  |
| 80°   | 186.3  | 214.2  | 271.2  | 338.3  | 361.2  |
| 82.5° | 119.1  | 143.2  | 200.2  | 263.6  | 280.1  |
| 85°   | 60.8   | 83.6   | 122.9  | 155.9  | 158.4  |
| 87.5° | 19.0   | 26.6   | 40.6   | 60.8   | 62.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 15.33            | 16.99 | 15.69 | 17.31 | 17.62 | 16.16          | 17.82 | 16.52 | 18.14 | 18.45 |
|                 | 3H   | 17.08            | 18.59 | 17.46 | 18.92 | 19.28 | 18.28          | 19.78 | 18.65 | 20.11 | 20.47 |
|                 | 4H   | 17.70            | 19.13 | 18.10 | 19.47 | 19.85 | 19.16          | 20.59 | 19.56 | 20.93 | 21.31 |
|                 | 6H   | 18.11            | 19.44 | 18.52 | 19.80 | 20.19 | 19.95          | 21.27 | 20.36 | 21.63 | 22.02 |
|                 | 8H   | 18.22            | 19.48 | 18.65 | 19.87 | 20.27 | 20.27          | 21.53 | 20.69 | 21.92 | 22.32 |
|                 | 12H  | 18.27            | 19.48 | 18.70 | 19.87 | 20.29 | 20.48          | 21.69 | 20.91 | 22.07 | 22.50 |
| 4H              | 2H   | 16.10            | 17.52 | 16.50 | 17.87 | 18.25 | 16.75          | 18.17 | 17.14 | 18.52 | 18.89 |
|                 | 3H   | 18.08            | 19.28 | 18.49 | 19.67 | 20.07 | 19.10          | 20.30 | 19.51 | 20.70 | 21.10 |
|                 | 4H   | 18.82            | 19.90 | 19.25 | 20.31 | 20.75 | 20.15          | 21.24 | 20.58 | 21.65 | 22.09 |
|                 | 6H   | 19.34            | 20.30 | 19.80 | 20.74 | 21.19 | 21.11          | 22.06 | 21.56 | 22.50 | 22.95 |
|                 | 8H   | 19.49            | 20.38 | 19.95 | 20.82 | 21.29 | 21.50          | 22.40 | 21.96 | 22.84 | 23.30 |
|                 | 12H  | 19.57            | 20.38 | 20.05 | 20.85 | 21.32 | 21.78          | 22.58 | 22.26 | 23.06 | 23.53 |
| 8H              | 4H   | 19.27            | 20.17 | 19.73 | 20.61 | 21.07 | 20.44          | 21.34 | 20.90 | 21.78 | 22.24 |
|                 | 6H   | 19.94            | 20.68 | 20.43 | 21.17 | 21.64 | 21.56          | 22.30 | 22.05 | 22.79 | 23.26 |
|                 | 8H   | 20.15            | 20.81 | 20.65 | 21.32 | 21.80 | 22.07          | 22.74 | 22.57 | 23.24 | 23.73 |
|                 | 12H  | 20.29            | 20.88 | 20.79 | 21.37 | 21.93 | 22.45          | 23.04 | 22.96 | 23.53 | 24.09 |
| 12H             | 4H   | 19.36            | 20.17 | 19.84 | 20.64 | 21.11 | 20.47          | 21.27 | 20.95 | 21.75 | 22.21 |
|                 | 6H   | 20.07            | 20.74 | 20.57 | 21.24 | 21.73 | 21.60          | 22.27 | 22.11 | 22.78 | 23.26 |
|                 | 8H   | 20.35            | 20.94 | 20.85 | 21.43 | 21.99 | 22.18          | 22.77 | 22.69 | 23.26 | 23.82 |

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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