

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: P1589926

Luminaire Tested: 24CZSP-SB-62-L940-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1589926  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 24CZSP-SB-62-L940-S  
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5500 lumens, 90CRI, Smooth Lens, SB housing  
Light Source: -  
Ballast/Driver: -

**Summary**

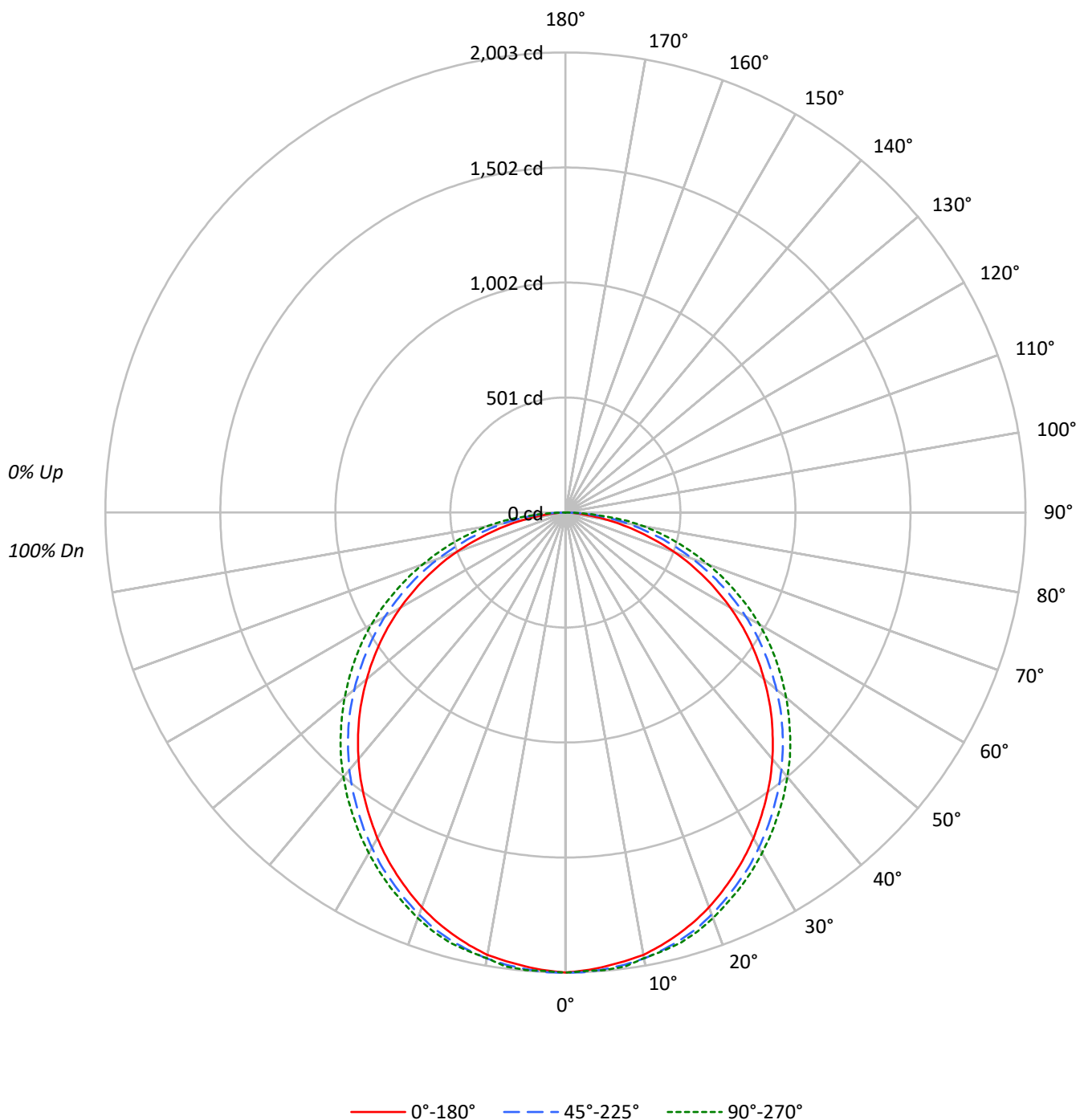
Lumens per Lamp: N/A  
Luminaire Lumens: 5827.0 lumens  
Efficiency: N/A  
Efficacy: 130.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 44.5  
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: 28.75 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  | 94  | 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  | 66  | 61  |  | 69  | 64  | 60  | 58  |
| 4   | 82  | 70  | 61  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 53  |  | 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  | 45  | 39  |  | 50  | 44  | 39  | 37  |
| 7   | 64  | 51  | 42  | 35  | 63  | 50  | 41  | 35  | 48  | 41  | 35  |  | 47  | 40  | 35  |  | 45  | 39  | 35  | 33  |
| 8   | 60  | 46  | 38  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 41  | 33  | 28  |  | 39  | 33  | 28  |  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 30  | 26  |  | 37  | 30  | 25  |  | 36  | 30  | 25  | 24  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3068 | 3068 | 3068 |
| 5°  | 3051 | 3068 | 3074 |
| 10° | 3041 | 3067 | 3065 |
| 15° | 3013 | 3057 | 3075 |
| 20° | 2981 | 3036 | 3063 |
| 25° | 2938 | 3006 | 3044 |
| 30° | 2895 | 2980 | 3028 |
| 35° | 2848 | 2951 | 3014 |
| 40° | 2802 | 2925 | 3005 |
| 45° | 2750 | 2894 | 2998 |
| 50° | 2691 | 2858 | 2990 |
| 55° | 2624 | 2822 | 2986 |
| 60° | 2542 | 2780 | 2987 |
| 65° | 2426 | 2721 | 2971 |
| 70° | 2268 | 2639 | 2964 |
| 75° | 2010 | 2537 | 2975 |
| 80° | 1636 | 2411 | 3062 |
| 85° | 1058 | 2225 | 2643 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3104 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 189.6  | 3.3       |
| 10°-20°   | 542.8  | 9.3       |
| 20°-30°   | 818.5  | 14.0      |
| 30°-40°   | 984.8  | 16.9      |
| 40°-50°   | 1027.3 | 17.6      |
| 50°-60°   | 941.6  | 16.2      |
| 60°-70°   | 739.4  | 12.7      |
| 70°-80°   | 450.0  | 7.7       |
| 80°-90°   | 133.1  | 2.3       |
| 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°    | 1550.8 | 26.6      |
| 0°-40°    | 2535.7 | 43.5      |
| 0°-60°    | 4504.5 | 77.3      |
| 0°-90°    | 5827.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5827.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2003 | 2003  | 2003 | 2003  | 2003 |      |
| 5°  | 1984 | 1997  | 1996 | 1993  | 1999 | 189  |
| 15° | 1900 | 1919  | 1928 | 1930  | 1939 | 536  |
| 25° | 1739 | 1762  | 1779 | 1790  | 1801 | 801  |
| 35° | 1523 | 1547  | 1578 | 1601  | 1612 | 953  |
| 45° | 1270 | 1296  | 1336 | 1368  | 1384 | 979  |
| 55° | 983  | 1008  | 1057 | 1099  | 1118 | 878  |
| 65° | 669  | 694   | 751  | 801   | 820  | 662  |
| 75° | 340  | 371   | 429  | 480   | 503  | 360  |
| 85° | 60   | 85    | 127  | 142   | 150  | 78   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2003.1 | 2003.1 | 2003.1 | 2003.1 | 2003.1 |
| 2.5°  | 1995.6 | 2005.6 | 2003.1 | 1994.3 | 1998.1 |
| 5°    | 1984.3 | 1996.9 | 1995.6 | 1993.1 | 1999.4 |
| 7.5°  | 1970.5 | 1984.3 | 1985.6 | 1985.6 | 1993.1 |
| 10°   | 1955.5 | 1969.3 | 1971.8 | 1968.0 | 1970.5 |
| 12.5° | 1930.4 | 1946.7 | 1951.7 | 1951.7 | 1955.5 |
| 15°   | 1900.3 | 1919.1 | 1927.9 | 1930.4 | 1939.2 |
| 17.5° | 1867.7 | 1887.8 | 1899.1 | 1905.3 | 1912.9 |
| 20°   | 1828.9 | 1850.2 | 1862.7 | 1870.2 | 1879.0 |
| 22.5° | 1785.0 | 1808.8 | 1822.6 | 1830.1 | 1840.2 |
| 25°   | 1738.6 | 1762.4 | 1778.7 | 1790.0 | 1801.3 |
| 27.5° | 1689.7 | 1712.3 | 1734.9 | 1748.7 | 1758.7 |
| 30°   | 1637.1 | 1660.9 | 1684.7 | 1702.3 | 1712.3 |
| 32.5° | 1580.7 | 1605.8 | 1633.3 | 1652.1 | 1663.4 |
| 35°   | 1523.0 | 1546.8 | 1578.2 | 1600.7 | 1612.0 |
| 37.5° | 1464.1 | 1489.2 | 1521.8 | 1545.6 | 1559.4 |
| 40°   | 1401.4 | 1427.8 | 1462.9 | 1489.2 | 1503.0 |
| 42.5° | 1336.2 | 1361.3 | 1400.2 | 1430.3 | 1446.6 |
| 45°   | 1269.8 | 1296.1 | 1336.2 | 1367.6 | 1383.9 |
| 47.5° | 1200.9 | 1225.9 | 1269.8 | 1306.2 | 1320.0 |
| 50°   | 1129.4 | 1153.2 | 1199.6 | 1238.5 | 1254.8 |
| 52.5° | 1056.7 | 1081.8 | 1128.2 | 1169.5 | 1187.1 |
| 55°   | 982.8  | 1007.8 | 1056.7 | 1099.3 | 1118.1 |
| 57.5° | 907.5  | 932.6  | 982.8  | 1026.6 | 1049.2 |
| 60°   | 829.8  | 854.9  | 907.5  | 952.7  | 975.2  |
| 62.5° | 749.6  | 775.9  | 829.8  | 876.2  | 900.0  |
| 65°   | 669.4  | 694.4  | 750.9  | 801.0  | 819.8  |
| 67.5° | 589.2  | 614.2  | 669.4  | 719.5  | 742.1  |
| 70°   | 506.4  | 535.3  | 589.2  | 641.8  | 661.9  |
| 72.5° | 419.9  | 452.5  | 506.4  | 561.6  | 581.6  |
| 75°   | 339.7  | 371.0  | 428.7  | 480.1  | 502.7  |
| 77.5° | 260.7  | 294.6  | 348.5  | 401.1  | 423.7  |
| 80°   | 185.5  | 218.1  | 273.3  | 323.4  | 347.2  |
| 82.5° | 117.8  | 146.7  | 201.8  | 246.9  | 264.5  |
| 85°   | 60.2   | 85.2   | 126.6  | 141.6  | 150.4  |
| 87.5° | 17.5   | 30.1   | 45.1   | 56.4   | 62.7   |
| 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 | 15.4             | 17.1 | 15.8 | 17.4 | 17.7 | 16.1           | 17.8 | 16.5 | 18.1 | 18.4 |
|                 | 3H   | 17.2             | 18.7 | 17.5 | 19.0 | 19.4 | 18.2           | 19.7 | 18.6 | 20.0 | 20.4 |
|                 | 4H   | 17.8             | 19.2 | 18.2 | 19.5 | 19.9 | 19.1           | 20.5 | 19.5 | 20.8 | 21.2 |
|                 | 6H   | 18.2             | 19.5 | 18.6 | 19.9 | 20.3 | 19.8           | 21.1 | 20.2 | 21.5 | 21.9 |
|                 | 8H   | 18.3             | 19.6 | 18.7 | 19.9 | 20.3 | 20.1           | 21.4 | 20.5 | 21.8 | 22.2 |
|                 | 12H  | 18.3             | 19.6 | 18.8 | 19.9 | 20.4 | 20.3           | 21.5 | 20.7 | 21.9 | 22.3 |
| 4H              | 2H   | 16.2             | 17.6 | 16.6 | 17.9 | 18.3 | 16.7           | 18.2 | 17.1 | 18.5 | 18.9 |
|                 | 3H   | 18.2             | 19.3 | 18.6 | 19.7 | 20.1 | 19.0           | 20.2 | 19.5 | 20.6 | 21.0 |
|                 | 4H   | 18.9             | 20.0 | 19.3 | 20.4 | 20.8 | 20.1           | 21.1 | 20.5 | 21.6 | 22.0 |
|                 | 6H   | 19.4             | 20.4 | 19.9 | 20.8 | 21.3 | 21.0           | 21.9 | 21.4 | 22.4 | 22.8 |
|                 | 8H   | 19.6             | 20.5 | 20.0 | 20.9 | 21.4 | 21.3           | 22.2 | 21.8 | 22.7 | 23.1 |
|                 | 12H  | 19.6             | 20.4 | 20.1 | 20.9 | 21.4 | 21.6           | 22.4 | 22.1 | 22.9 | 23.3 |
| 8H              | 4H   | 19.3             | 20.2 | 19.8 | 20.7 | 21.1 | 20.4           | 21.3 | 20.8 | 21.7 | 22.2 |
|                 | 6H   | 20.0             | 20.7 | 20.5 | 21.2 | 21.7 | 21.4           | 22.2 | 21.9 | 22.6 | 23.1 |
|                 | 8H   | 20.2             | 20.9 | 20.7 | 21.4 | 21.9 | 21.9           | 22.6 | 22.4 | 23.1 | 23.5 |
|                 | 12H  | 20.4             | 20.9 | 20.9 | 21.4 | 22.0 | 22.2           | 22.8 | 22.7 | 23.3 | 23.9 |
| 12H             | 4H   | 19.4             | 20.2 | 19.9 | 20.7 | 21.2 | 20.4           | 21.2 | 20.9 | 21.7 | 22.1 |
|                 | 6H   | 20.1             | 20.8 | 20.7 | 21.3 | 21.8 | 21.5           | 22.2 | 22.0 | 22.6 | 23.2 |
|                 | 8H   | 20.4             | 21.0 | 20.9 | 21.5 | 22.0 | 22.0           | 22.6 | 22.5 | 23.1 | 23.6 |

(END OF REPORT)