

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: P1589942

Luminaire Tested: 24CZSP-SB-65-L930-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1589942  
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-65-L930-S  
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 90CRI, Smooth Lens, SB housing  
Light Source: -  
Ballast/Driver: -

**Summary**

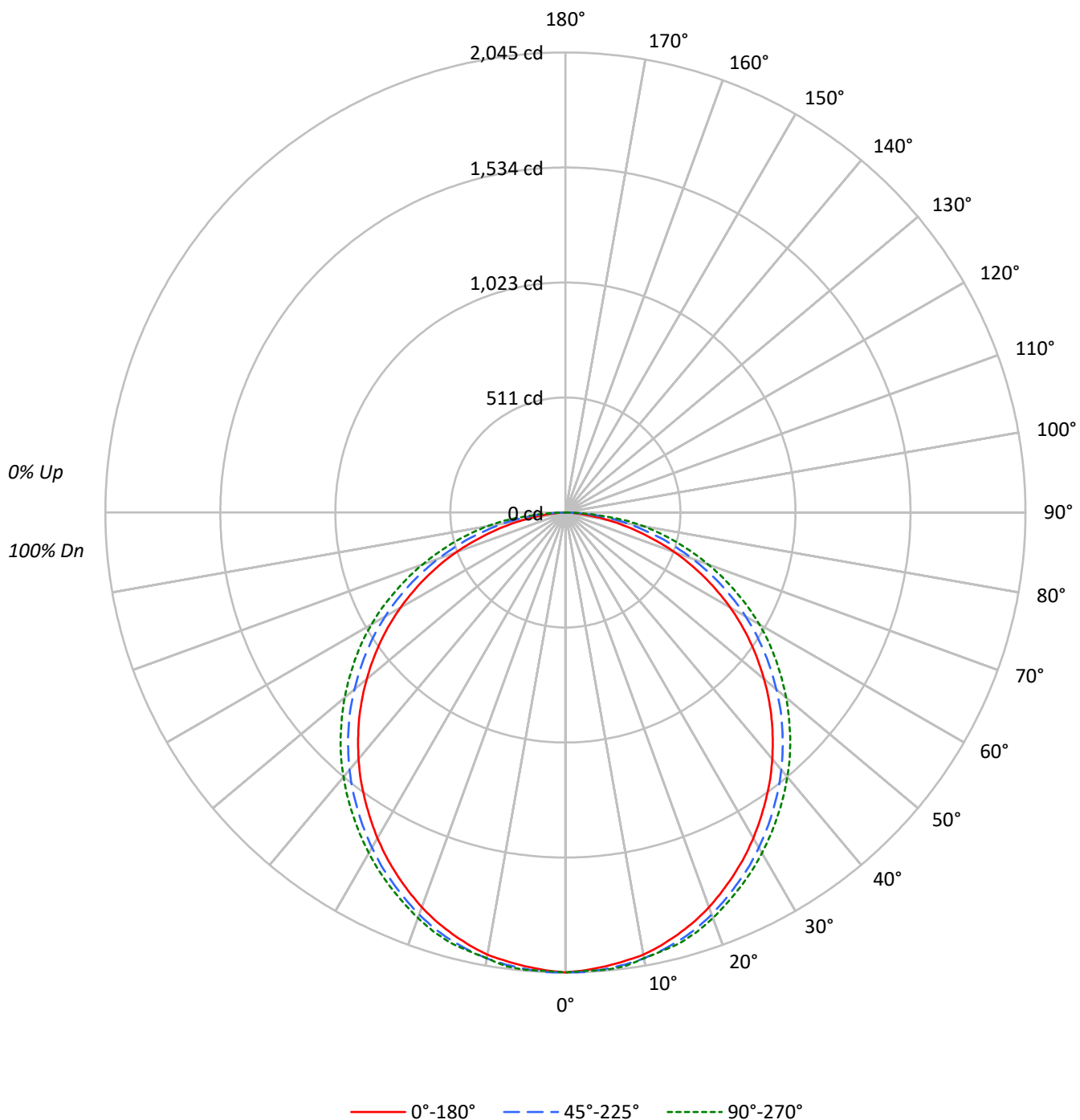
Lumens per Lamp: N/A  
Luminaire Lumens: 5948.0 lumens  
Efficiency: N/A  
Efficacy: 124.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 47.9  
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: 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°  | 3132 | 3132 | 3132 |
| 5°  | 3114 | 3132 | 3138 |
| 10° | 3104 | 3130 | 3128 |
| 15° | 3076 | 3120 | 3139 |
| 20° | 3043 | 3099 | 3126 |
| 25° | 2999 | 3068 | 3107 |
| 30° | 2955 | 3041 | 3091 |
| 35° | 2907 | 3012 | 3077 |
| 40° | 2860 | 2985 | 3067 |
| 45° | 2808 | 2954 | 3060 |
| 50° | 2747 | 2918 | 3052 |
| 55° | 2679 | 2880 | 3048 |
| 60° | 2595 | 2838 | 3049 |
| 65° | 2476 | 2778 | 3033 |
| 70° | 2315 | 2693 | 3025 |
| 75° | 2052 | 2590 | 3036 |
| 80° | 1671 | 2460 | 3126 |
| 85° | 1079 | 2270 | 2698 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3168 cd/sqm

TEST NUMBER: P1589942

CATALOG NUMBER: 24CZSP-SB-65-L930-S

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 193.5  | 3.3       |
| 10°-20°   | 554.1  | 9.3       |
| 20°-30°   | 835.5  | 14.0      |
| 30°-40°   | 1005.3 | 16.9      |
| 40°-50°   | 1048.6 | 17.6      |
| 50°-60°   | 961.1  | 16.2      |
| 60°-70°   | 754.7  | 12.7      |
| 70°-80°   | 459.3  | 7.7       |
| 80°-90°   | 135.9  | 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°    | 1583.1 | 26.6      |
| 0°-40°    | 2588.3 | 43.5      |
| 0°-60°    | 4598.1 | 77.3      |
| 0°-90°    | 5948.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5948.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2045 | 2045  | 2045 | 2045  | 2045 |      |
| 5°  | 2026 | 2038  | 2037 | 2034  | 2041 | 192  |
| 15° | 1940 | 1959  | 1968 | 1970  | 1980 | 547  |
| 25° | 1775 | 1799  | 1816 | 1827  | 1839 | 818  |
| 35° | 1555 | 1579  | 1611 | 1634  | 1646 | 973  |
| 45° | 1296 | 1323  | 1364 | 1396  | 1413 | 1000 |
| 55° | 1003 | 1029  | 1079 | 1122  | 1141 | 896  |
| 65° | 683  | 709   | 766  | 818   | 837  | 676  |
| 75° | 347  | 379   | 438  | 490   | 513  | 368  |
| 85° | 61   | 87    | 129  | 145   | 154  | 80   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1589942

CATALOG NUMBER: 24CZSP-SB-65-L930-S

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2044.7 | 2044.7 | 2044.7 | 2044.7 | 2044.7 |
| 2.5°  | 2037.0 | 2047.3 | 2044.7 | 2035.8 | 2039.6 |
| 5°    | 2025.5 | 2038.3 | 2037.0 | 2034.5 | 2040.9 |
| 7.5°  | 2011.4 | 2025.5 | 2026.8 | 2026.8 | 2034.5 |
| 10°   | 1996.1 | 2010.2 | 2012.7 | 2008.9 | 2011.4 |
| 12.5° | 1970.5 | 1987.1 | 1992.3 | 1992.3 | 1996.1 |
| 15°   | 1939.8 | 1959.0 | 1967.9 | 1970.5 | 1979.5 |
| 17.5° | 1906.5 | 1927.0 | 1938.5 | 1944.9 | 1952.6 |
| 20°   | 1866.9 | 1888.6 | 1901.4 | 1909.1 | 1918.0 |
| 22.5° | 1822.1 | 1846.4 | 1860.5 | 1868.1 | 1878.4 |
| 25°   | 1774.7 | 1799.0 | 1815.7 | 1827.2 | 1838.7 |
| 27.5° | 1724.8 | 1747.9 | 1770.9 | 1785.0 | 1795.2 |
| 30°   | 1671.1 | 1695.4 | 1719.7 | 1737.6 | 1747.9 |
| 32.5° | 1613.5 | 1639.1 | 1667.2 | 1686.4 | 1698.0 |
| 35°   | 1554.6 | 1579.0 | 1610.9 | 1634.0 | 1645.5 |
| 37.5° | 1494.5 | 1520.1 | 1553.4 | 1577.7 | 1591.8 |
| 40°   | 1430.5 | 1457.4 | 1493.2 | 1520.1 | 1534.2 |
| 42.5° | 1364.0 | 1389.6 | 1429.3 | 1460.0 | 1476.6 |
| 45°   | 1296.2 | 1323.1 | 1364.0 | 1396.0 | 1412.6 |
| 47.5° | 1225.8 | 1251.4 | 1296.2 | 1333.3 | 1347.4 |
| 50°   | 1152.9 | 1177.2 | 1224.5 | 1264.2 | 1280.8 |
| 52.5° | 1078.7 | 1104.2 | 1151.6 | 1193.8 | 1211.7 |
| 55°   | 1003.2 | 1028.8 | 1078.7 | 1122.2 | 1141.4 |
| 57.5° | 926.4  | 952.0  | 1003.2 | 1047.9 | 1071.0 |
| 60°   | 847.1  | 872.7  | 926.4  | 972.5  | 995.5  |
| 62.5° | 765.2  | 792.0  | 847.1  | 894.4  | 918.7  |
| 65°   | 683.3  | 708.9  | 766.4  | 817.6  | 836.8  |
| 67.5° | 601.4  | 627.0  | 683.3  | 734.5  | 757.5  |
| 70°   | 516.9  | 546.4  | 601.4  | 655.1  | 675.6  |
| 72.5° | 428.6  | 461.9  | 516.9  | 573.2  | 593.7  |
| 75°   | 346.8  | 378.7  | 437.6  | 490.1  | 513.1  |
| 77.5° | 266.1  | 300.7  | 355.7  | 409.5  | 432.5  |
| 80°   | 189.4  | 222.6  | 278.9  | 330.1  | 354.4  |
| 82.5° | 120.3  | 149.7  | 206.0  | 252.1  | 270.0  |
| 85°   | 61.4   | 87.0   | 129.2  | 144.6  | 153.5  |
| 87.5° | 17.9   | 30.7   | 46.1   | 57.6   | 64.0   |
| 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 | 15.5             | 17.1 | 15.8 | 17.4 | 17.8 | 16.2           | 17.9 | 16.6 | 18.2 | 18.5 |
|                 | 3H   | 17.2             | 18.7 | 17.6 | 19.1 | 19.4 | 18.3           | 19.8 | 18.7 | 20.1 | 20.5 |
|                 | 4H   | 17.9             | 19.3 | 18.3 | 19.6 | 20.0 | 19.1           | 20.6 | 19.5 | 20.9 | 21.3 |
|                 | 6H   | 18.3             | 19.6 | 18.7 | 19.9 | 20.3 | 19.9           | 21.2 | 20.3 | 21.6 | 22.0 |
|                 | 8H   | 18.4             | 19.6 | 18.8 | 20.0 | 20.4 | 20.2           | 21.4 | 20.6 | 21.8 | 22.2 |
|                 | 12H  | 18.4             | 19.6 | 18.8 | 20.0 | 20.4 | 20.4           | 21.6 | 20.8 | 22.0 | 22.4 |
| 4H              | 2H   | 16.2             | 17.7 | 16.6 | 18.0 | 18.4 | 16.8           | 18.2 | 17.2 | 18.6 | 18.9 |
|                 | 3H   | 18.2             | 19.4 | 18.6 | 19.8 | 20.2 | 19.1           | 20.3 | 19.5 | 20.7 | 21.1 |
|                 | 4H   | 19.0             | 20.1 | 19.4 | 20.5 | 20.9 | 20.1           | 21.2 | 20.6 | 21.6 | 22.1 |
|                 | 6H   | 19.5             | 20.4 | 19.9 | 20.9 | 21.3 | 21.0           | 22.0 | 21.5 | 22.4 | 22.9 |
|                 | 8H   | 19.6             | 20.5 | 20.1 | 21.0 | 21.4 | 21.4           | 22.3 | 21.9 | 22.7 | 23.2 |
|                 | 12H  | 19.7             | 20.5 | 20.2 | 21.0 | 21.5 | 21.7           | 22.5 | 22.1 | 22.9 | 23.4 |
| 8H              | 4H   | 19.4             | 20.3 | 19.9 | 20.7 | 21.2 | 20.4           | 21.3 | 20.9 | 21.8 | 22.2 |
|                 | 6H   | 20.1             | 20.8 | 20.6 | 21.3 | 21.8 | 21.5           | 22.2 | 22.0 | 22.7 | 23.2 |
|                 | 8H   | 20.3             | 21.0 | 20.8 | 21.5 | 21.9 | 22.0           | 22.6 | 22.5 | 23.1 | 23.6 |
|                 | 12H  | 20.4             | 21.0 | 20.9 | 21.5 | 22.1 | 22.3           | 22.9 | 22.8 | 23.4 | 24.0 |
| 12H             | 4H   | 19.5             | 20.3 | 20.0 | 20.8 | 21.2 | 20.5           | 21.3 | 20.9 | 21.7 | 22.2 |
|                 | 6H   | 20.2             | 20.9 | 20.7 | 21.3 | 21.9 | 21.6           | 22.2 | 22.1 | 22.7 | 23.2 |
|                 | 8H   | 20.5             | 21.1 | 21.0 | 21.6 | 22.1 | 22.1           | 22.7 | 22.6 | 23.2 | 23.7 |

(END OF REPORT)