

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: P1589919

Luminaire Tested: 24CZSP-SB-62-L845

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1589919  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 24CZSP-SB-62-L845  
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5500 lumens, 80CRI, Ribbed Lens, SB housing  
Light Source: -  
Ballast/Driver: -

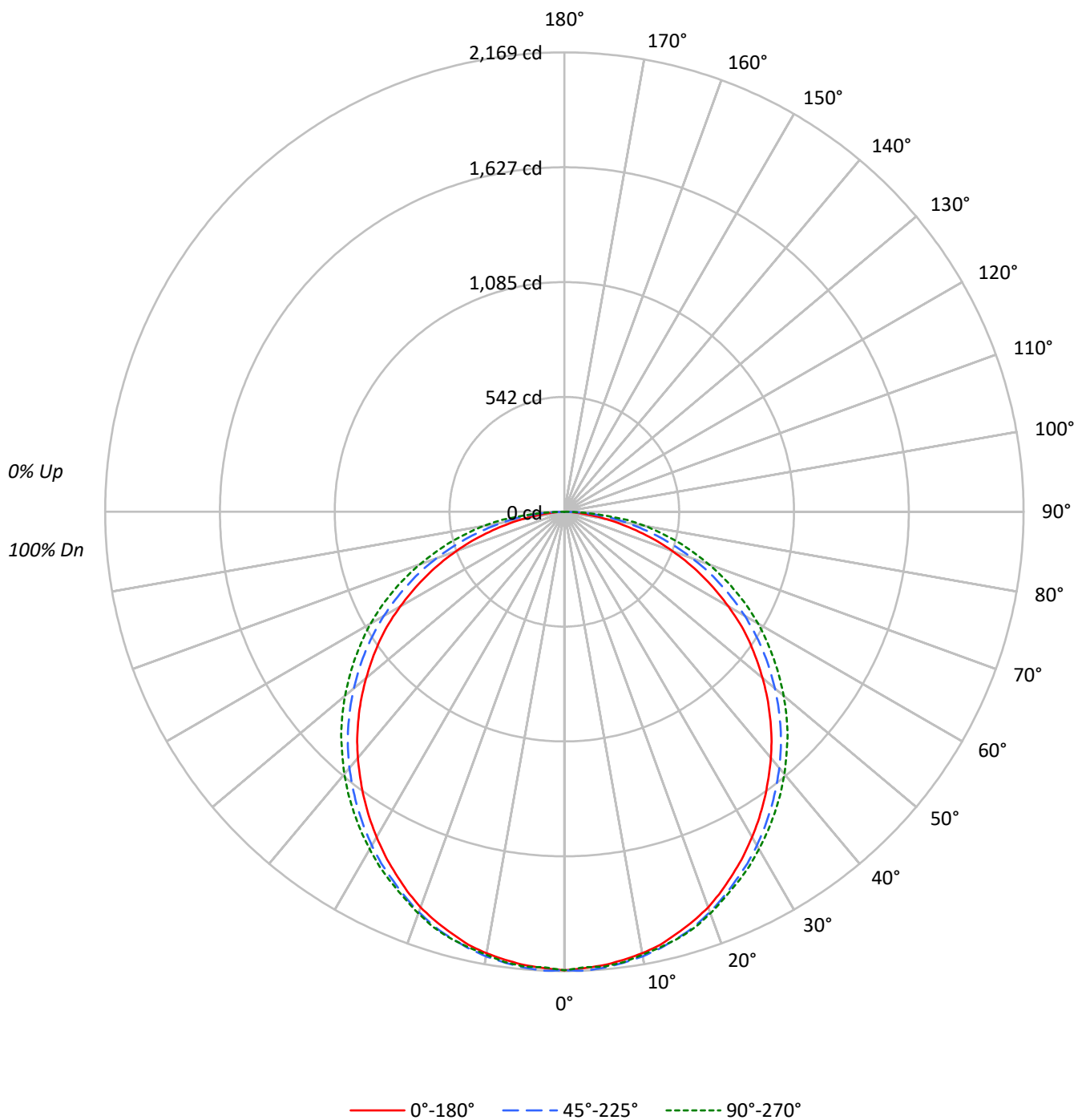
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6318.0 lumens  
Efficiency: N/A  
Efficacy: 142.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.26 / 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  | 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  | 68  |
| 3   | 89  | 79  | 70  | 63  | 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°  | 3316 | 3316 | 3316 |
| 5°  | 3304 | 3322 | 3314 |
| 10° | 3292 | 3315 | 3303 |
| 15° | 3267 | 3301 | 3306 |
| 20° | 3239 | 3278 | 3289 |
| 25° | 3186 | 3243 | 3266 |
| 30° | 3136 | 3216 | 3252 |
| 35° | 3085 | 3185 | 3240 |
| 40° | 3034 | 3157 | 3232 |
| 45° | 2977 | 3128 | 3230 |
| 50° | 2912 | 3094 | 3221 |
| 55° | 2846 | 3060 | 3221 |
| 60° | 2740 | 3015 | 3240 |
| 65° | 2612 | 2956 | 3242 |
| 70° | 2437 | 2875 | 3252 |
| 75° | 2168 | 2770 | 3307 |
| 80° | 1781 | 2654 | 3432 |
| 85° | 1176 | 2490 | 3102 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3514 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 204.8  | 3.2       |
| 10°-20°   | 586.2  | 9.3       |
| 20°-30°   | 883.5  | 14.0      |
| 30°-40°   | 1064.0 | 16.8      |
| 40°-50°   | 1111.6 | 17.6      |
| 50°-60°   | 1021.2 | 16.2      |
| 60°-70°   | 804.2  | 12.7      |
| 70°-80°   | 493.0  | 7.8       |
| 80°-90°   | 149.5  | 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°    | 1674.5 | 26.5      |
| 0°-40°    | 2738.5 | 43.3      |
| 0°-60°    | 4871.3 | 77.1      |
| 0°-90°    | 6318.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6318.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2165 | 2165  | 2165 | 2165  | 2165 |      |
| 5°  | 2149 | 2153  | 2161 | 2158  | 2156 | 204  |
| 15° | 2061 | 2069  | 2082 | 2090  | 2085 | 582  |
| 25° | 1886 | 1898  | 1919 | 1939  | 1932 | 869  |
| 35° | 1650 | 1672  | 1704 | 1734  | 1733 | 1032 |
| 45° | 1375 | 1404  | 1444 | 1484  | 1491 | 1060 |
| 55° | 1066 | 1096  | 1146 | 1196  | 1206 | 951  |
| 65° | 721  | 758   | 816  | 870   | 895  | 713  |
| 75° | 366  | 409   | 468  | 524   | 559  | 389  |
| 85° | 67   | 99    | 142  | 158   | 176  | 86   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2164.9 | 2164.9 | 2164.9 | 2164.9 | 2164.9 |
| 2.5°  | 2156.9 | 2162.3 | 2168.9 | 2158.2 | 2152.9 |
| 5°    | 2148.9 | 2152.9 | 2160.9 | 2158.2 | 2155.6 |
| 7.5°  | 2134.2 | 2136.8 | 2147.5 | 2147.5 | 2144.9 |
| 10°   | 2116.8 | 2122.1 | 2131.5 | 2130.2 | 2123.5 |
| 12.5° | 2094.1 | 2098.1 | 2108.8 | 2108.8 | 2104.8 |
| 15°   | 2060.6 | 2068.6 | 2082.0 | 2090.0 | 2084.7 |
| 17.5° | 2025.9 | 2033.9 | 2051.3 | 2059.3 | 2056.6 |
| 20°   | 1987.1 | 1993.8 | 2011.1 | 2023.2 | 2017.8 |
| 22.5° | 1938.9 | 1947.0 | 1967.0 | 1980.4 | 1975.0 |
| 25°   | 1885.5 | 1897.5 | 1918.9 | 1938.9 | 1932.3 |
| 27.5° | 1832.0 | 1845.3 | 1872.1 | 1892.1 | 1889.5 |
| 30°   | 1773.1 | 1790.5 | 1818.6 | 1844.0 | 1838.6 |
| 32.5° | 1713.0 | 1733.0 | 1762.4 | 1789.2 | 1787.8 |
| 35°   | 1650.1 | 1671.5 | 1703.6 | 1734.3 | 1733.0 |
| 37.5° | 1583.2 | 1608.7 | 1642.1 | 1675.5 | 1676.8 |
| 40°   | 1517.7 | 1541.8 | 1579.2 | 1615.3 | 1616.7 |
| 42.5° | 1448.2 | 1473.6 | 1513.7 | 1551.2 | 1552.5 |
| 45°   | 1374.6 | 1404.1 | 1444.2 | 1484.3 | 1491.0 |
| 47.5° | 1299.8 | 1330.5 | 1372.0 | 1414.8 | 1422.8 |
| 50°   | 1222.2 | 1254.3 | 1298.4 | 1343.9 | 1351.9 |
| 52.5° | 1143.3 | 1176.7 | 1222.2 | 1267.7 | 1279.7 |
| 55°   | 1065.7 | 1096.5 | 1146.0 | 1195.5 | 1206.2 |
| 57.5° | 984.2  | 1012.3 | 1065.7 | 1117.9 | 1131.3 |
| 60°   | 894.6  | 929.4  | 984.2  | 1036.3 | 1057.7 |
| 62.5° | 807.7  | 845.1  | 901.3  | 953.4  | 977.5  |
| 65°   | 720.8  | 758.2  | 815.7  | 870.5  | 894.6  |
| 67.5° | 632.5  | 671.3  | 732.8  | 784.9  | 811.7  |
| 70°   | 544.2  | 583.0  | 641.9  | 698.0  | 726.1  |
| 72.5° | 456.0  | 497.4  | 554.9  | 612.4  | 640.5  |
| 75°   | 366.4  | 409.2  | 468.0  | 524.2  | 558.9  |
| 77.5° | 282.1  | 323.6  | 382.4  | 439.9  | 469.4  |
| 80°   | 201.9  | 243.4  | 300.9  | 358.4  | 389.1  |
| 82.5° | 128.4  | 167.1  | 223.3  | 271.5  | 299.5  |
| 85°   | 66.9   | 99.0   | 141.7  | 157.8  | 176.5  |
| 87.5° | 20.1   | 38.8   | 54.8   | 61.5   | 76.2   |
| 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 | 15.7             | 17.3 | 16.0 | 17.7 | 18.0 | 16.4           | 18.1 | 16.8 | 18.4 | 18.7 |
|                 | 3H   | 17.4             | 18.9 | 17.8 | 19.3 | 19.6 | 18.5           | 20.0 | 18.9 | 20.4 | 20.7 |
|                 | 4H   | 18.1             | 19.5 | 18.5 | 19.8 | 20.2 | 19.4           | 20.8 | 19.8 | 21.2 | 21.5 |
|                 | 6H   | 18.5             | 19.8 | 18.9 | 20.2 | 20.6 | 20.2           | 21.5 | 20.6 | 21.9 | 22.2 |
|                 | 8H   | 18.6             | 19.8 | 19.0 | 20.2 | 20.6 | 20.5           | 21.7 | 20.9 | 22.1 | 22.5 |
|                 | 12H  | 18.6             | 19.8 | 19.1 | 20.2 | 20.7 | 20.7           | 21.9 | 21.1 | 22.3 | 22.7 |
| 4H              | 2H   | 16.4             | 17.9 | 16.8 | 18.2 | 18.6 | 17.0           | 18.5 | 17.4 | 18.8 | 19.2 |
|                 | 3H   | 18.4             | 19.6 | 18.9 | 20.0 | 20.4 | 19.4           | 20.6 | 19.8 | 21.0 | 21.4 |
|                 | 4H   | 19.2             | 20.3 | 19.6 | 20.7 | 21.1 | 20.4           | 21.5 | 20.8 | 21.9 | 22.3 |
|                 | 6H   | 19.7             | 20.7 | 20.2 | 21.1 | 21.6 | 21.3           | 22.3 | 21.8 | 22.7 | 23.2 |
|                 | 8H   | 19.9             | 20.8 | 20.3 | 21.2 | 21.7 | 21.7           | 22.6 | 22.2 | 23.0 | 23.5 |
|                 | 12H  | 20.0             | 20.8 | 20.4 | 21.2 | 21.7 | 22.0           | 22.8 | 22.5 | 23.3 | 23.7 |
| 8H              | 4H   | 19.6             | 20.5 | 20.1 | 21.0 | 21.4 | 20.7           | 21.6 | 21.1 | 22.0 | 22.5 |
|                 | 6H   | 20.3             | 21.1 | 20.8 | 21.6 | 22.0 | 21.8           | 22.5 | 22.3 | 23.0 | 23.5 |
|                 | 8H   | 20.5             | 21.2 | 21.1 | 21.7 | 22.2 | 22.3           | 22.9 | 22.8 | 23.4 | 23.9 |
|                 | 12H  | 20.7             | 21.3 | 21.2 | 21.8 | 22.3 | 22.6           | 23.2 | 23.1 | 23.7 | 24.3 |
| 12H             | 4H   | 19.7             | 20.5 | 20.2 | 21.0 | 21.5 | 20.7           | 21.5 | 21.2 | 22.0 | 22.5 |
|                 | 6H   | 20.5             | 21.1 | 21.0 | 21.6 | 22.1 | 21.8           | 22.5 | 22.4 | 23.0 | 23.5 |
|                 | 8H   | 20.7             | 21.3 | 21.2 | 21.8 | 22.4 | 22.4           | 23.0 | 22.9 | 23.5 | 24.0 |

(END OF REPORT)