

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: P1589933

Luminaire Tested: 24CZSP-SB-65-L830

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1589933  
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-65-L830  
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 80CRI, Ribbed Lens, SB housing  
Light Source: -  
Ballast/Driver: -

**Summary**

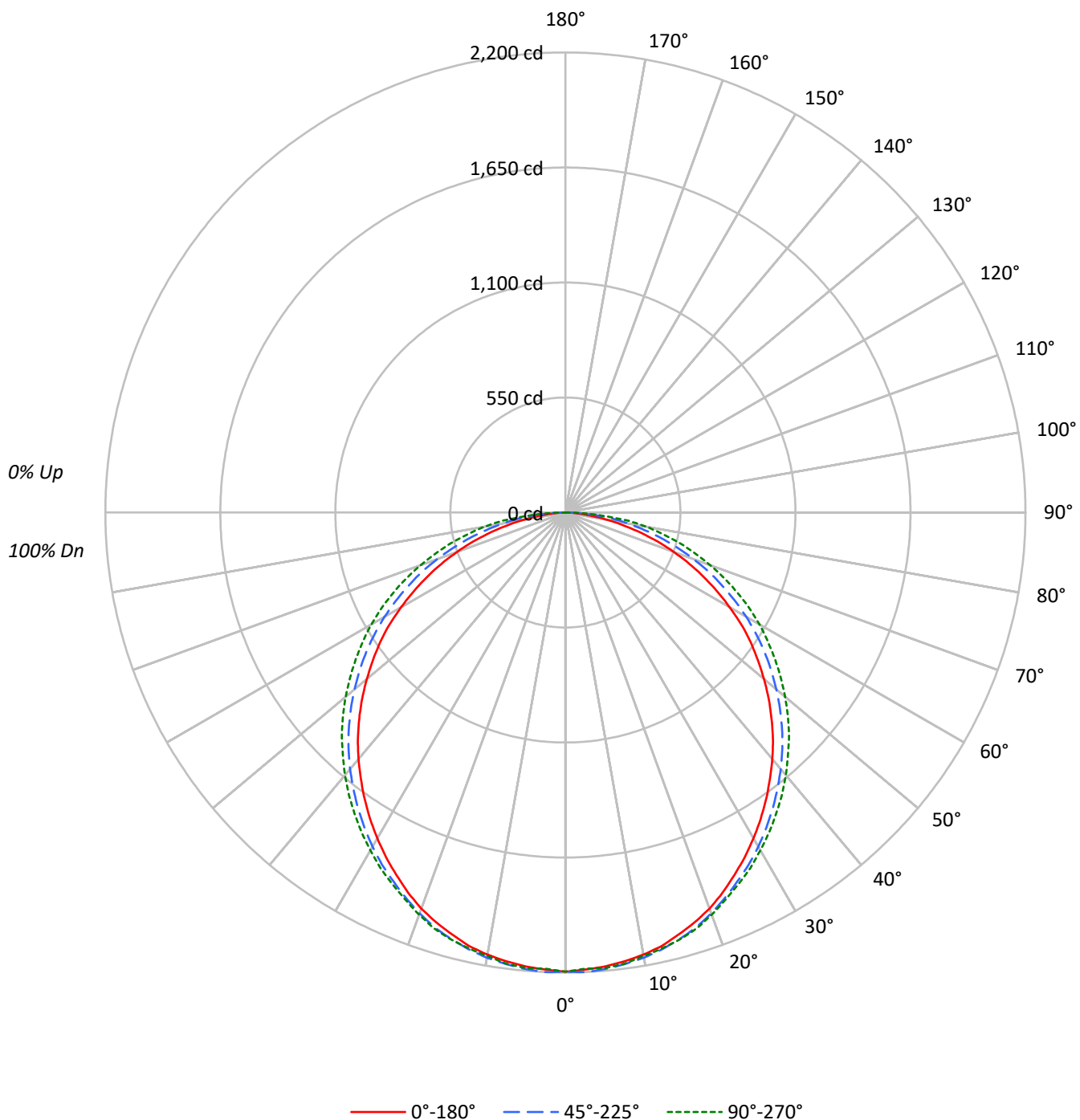
Lumens per Lamp: N/A  
Luminaire Lumens: 6408.0 lumens  
Efficiency: N/A  
Efficacy: 133.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 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  | 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°  | 3363 | 3363 | 3363 |
| 5°  | 3351 | 3370 | 3361 |
| 10° | 3339 | 3362 | 3350 |
| 15° | 3314 | 3348 | 3353 |
| 20° | 3285 | 3325 | 3336 |
| 25° | 3232 | 3289 | 3312 |
| 30° | 3181 | 3262 | 3298 |
| 35° | 3129 | 3231 | 3286 |
| 40° | 3078 | 3202 | 3278 |
| 45° | 3020 | 3173 | 3275 |
| 50° | 2954 | 3138 | 3267 |
| 55° | 2886 | 3104 | 3267 |
| 60° | 2779 | 3058 | 3286 |
| 65° | 2649 | 2998 | 3288 |
| 70° | 2472 | 2915 | 3298 |
| 75° | 2199 | 2809 | 3355 |
| 80° | 1806 | 2692 | 3481 |
| 85° | 1191 | 2527 | 3146 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3565 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 207.7  | 3.2       |
| 10°-20°   | 594.5  | 9.3       |
| 20°-30°   | 896.1  | 14.0      |
| 30°-40°   | 1079.1 | 16.8      |
| 40°-50°   | 1127.4 | 17.6      |
| 50°-60°   | 1035.8 | 16.2      |
| 60°-70°   | 815.6  | 12.7      |
| 70°-80°   | 500.1  | 7.8       |
| 80°-90°   | 151.6  | 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°    | 1698.3 | 26.5      |
| 0°-40°    | 2777.5 | 43.3      |
| 0°-60°    | 4940.7 | 77.1      |
| 0°-90°    | 6408.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6408.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2196 | 2196  | 2196 | 2196  | 2196 |      |
| 5°  | 2180 | 2184  | 2192 | 2189  | 2186 | 207  |
| 15° | 2090 | 2098  | 2112 | 2120  | 2114 | 590  |
| 25° | 1912 | 1924  | 1946 | 1967  | 1960 | 882  |
| 35° | 1674 | 1695  | 1728 | 1759  | 1758 | 1047 |
| 45° | 1394 | 1424  | 1465 | 1505  | 1512 | 1075 |
| 55° | 1081 | 1112  | 1162 | 1212  | 1223 | 964  |
| 65° | 731  | 769   | 827  | 883   | 907  | 723  |
| 75° | 372  | 415   | 475  | 532   | 567  | 395  |
| 85° | 68   | 100   | 144  | 160   | 179  | 87   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2195.8 | 2195.8 | 2195.8 | 2195.8 | 2195.8 |
| 2.5°  | 2187.6 | 2193.1 | 2199.8 | 2189.0 | 2183.6 |
| 5°    | 2179.5 | 2183.6 | 2191.7 | 2189.0 | 2186.3 |
| 7.5°  | 2164.6 | 2167.3 | 2178.1 | 2178.1 | 2175.4 |
| 10°   | 2146.9 | 2152.4 | 2161.9 | 2160.5 | 2153.7 |
| 12.5° | 2123.9 | 2128.0 | 2138.8 | 2138.8 | 2134.7 |
| 15°   | 2090.0 | 2098.1 | 2111.7 | 2119.8 | 2114.4 |
| 17.5° | 2054.7 | 2062.9 | 2080.5 | 2088.6 | 2085.9 |
| 20°   | 2015.4 | 2022.2 | 2039.8 | 2052.0 | 2046.6 |
| 22.5° | 1966.6 | 1974.7 | 1995.0 | 2008.6 | 2003.2 |
| 25°   | 1912.3 | 1924.5 | 1946.2 | 1966.6 | 1959.8 |
| 27.5° | 1858.1 | 1871.6 | 1898.7 | 1919.1 | 1916.4 |
| 30°   | 1798.4 | 1816.0 | 1844.5 | 1870.3 | 1864.8 |
| 32.5° | 1737.4 | 1757.7 | 1787.5 | 1814.7 | 1813.3 |
| 35°   | 1673.6 | 1695.3 | 1727.9 | 1759.1 | 1757.7 |
| 37.5° | 1605.8 | 1631.6 | 1665.5 | 1699.4 | 1700.7 |
| 40°   | 1539.3 | 1563.8 | 1601.7 | 1638.3 | 1639.7 |
| 42.5° | 1468.8 | 1494.6 | 1535.3 | 1573.2 | 1574.6 |
| 45°   | 1394.2 | 1424.1 | 1464.7 | 1505.4 | 1512.2 |
| 47.5° | 1318.3 | 1349.5 | 1391.5 | 1434.9 | 1443.0 |
| 50°   | 1239.6 | 1272.2 | 1316.9 | 1363.0 | 1371.2 |
| 52.5° | 1159.6 | 1193.5 | 1239.6 | 1285.7 | 1297.9 |
| 55°   | 1080.9 | 1112.1 | 1162.3 | 1212.5 | 1223.3 |
| 57.5° | 998.2  | 1026.7 | 1080.9 | 1133.8 | 1147.4 |
| 60°   | 907.3  | 942.6  | 998.2  | 1051.1 | 1072.8 |
| 62.5° | 819.2  | 857.1  | 914.1  | 967.0  | 991.4  |
| 65°   | 731.0  | 769.0  | 827.3  | 882.9  | 907.3  |
| 67.5° | 641.5  | 680.8  | 743.2  | 796.1  | 823.2  |
| 70°   | 552.0  | 591.3  | 651.0  | 708.0  | 736.4  |
| 72.5° | 462.5  | 504.5  | 562.8  | 621.2  | 649.6  |
| 75°   | 371.6  | 415.0  | 474.7  | 531.6  | 566.9  |
| 77.5° | 286.2  | 328.2  | 387.9  | 446.2  | 476.0  |
| 80°   | 204.8  | 246.8  | 305.2  | 363.5  | 394.7  |
| 82.5° | 130.2  | 169.5  | 226.5  | 275.3  | 303.8  |
| 85°   | 67.8   | 100.4  | 143.8  | 160.0  | 179.0  |
| 87.5° | 20.3   | 39.3   | 55.6   | 62.4   | 77.3   |
| 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             | 17.4 | 16.1 | 17.7 | 18.0 | 16.5           | 18.1 | 16.8 | 18.5 | 18.8 |
|                 | 3H   | 17.5             | 19.0 | 17.9 | 19.3 | 19.7 | 18.6           | 20.1 | 18.9 | 20.4 | 20.8 |
|                 | 4H   | 18.1             | 19.5 | 18.5 | 19.9 | 20.3 | 19.5           | 20.9 | 19.9 | 21.2 | 21.6 |
|                 | 6H   | 18.5             | 19.8 | 18.9 | 20.2 | 20.6 | 20.2           | 21.5 | 20.6 | 21.9 | 22.3 |
|                 | 8H   | 18.6             | 19.9 | 19.1 | 20.3 | 20.7 | 20.5           | 21.8 | 21.0 | 22.2 | 22.6 |
|                 | 12H  | 18.7             | 19.9 | 19.1 | 20.3 | 20.7 | 20.7           | 22.0 | 21.2 | 22.3 | 22.8 |
| 4H              | 2H   | 16.5             | 17.9 | 16.9 | 18.3 | 18.6 | 17.1           | 18.5 | 17.5 | 18.8 | 19.2 |
|                 | 3H   | 18.5             | 19.7 | 18.9 | 20.1 | 20.5 | 19.4           | 20.6 | 19.8 | 21.0 | 21.4 |
|                 | 4H   | 19.2             | 20.3 | 19.7 | 20.7 | 21.2 | 20.4           | 21.5 | 20.9 | 21.9 | 22.4 |
|                 | 6H   | 19.8             | 20.7 | 20.2 | 21.2 | 21.6 | 21.4           | 22.3 | 21.8 | 22.8 | 23.2 |
|                 | 8H   | 19.9             | 20.8 | 20.4 | 21.3 | 21.7 | 21.8           | 22.6 | 22.2 | 23.1 | 23.6 |
|                 | 12H  | 20.0             | 20.8 | 20.5 | 21.3 | 21.8 | 22.0           | 22.8 | 22.5 | 23.3 | 23.8 |
| 8H              | 4H   | 19.7             | 20.6 | 20.2 | 21.0 | 21.5 | 20.7           | 21.6 | 21.2 | 22.1 | 22.5 |
|                 | 6H   | 20.4             | 21.1 | 20.9 | 21.6 | 22.1 | 21.8           | 22.6 | 22.3 | 23.1 | 23.5 |
|                 | 8H   | 20.6             | 21.3 | 21.1 | 21.8 | 22.3 | 22.3           | 23.0 | 22.8 | 23.5 | 24.0 |
|                 | 12H  | 20.7             | 21.3 | 21.2 | 21.8 | 22.4 | 22.7           | 23.3 | 23.2 | 23.8 | 24.3 |
| 12H             | 4H   | 19.8             | 20.6 | 20.3 | 21.1 | 21.5 | 20.8           | 21.6 | 21.2 | 22.0 | 22.5 |
|                 | 6H   | 20.5             | 21.2 | 21.0 | 21.6 | 22.2 | 21.9           | 22.6 | 22.4 | 23.0 | 23.6 |
|                 | 8H   | 20.8             | 21.4 | 21.3 | 21.9 | 22.4 | 22.4           | 23.0 | 22.9 | 23.5 | 24.1 |

(END OF REPORT)