

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: P1590012

Luminaire Tested: 24CZSP-SB-75VHE-L830-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1590012  
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-75VHE-L830-S  
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 8000 lumens, 80CRI, Smooth Lens, SB housing  
Light Source: -  
Ballast/Driver: -

**Summary**

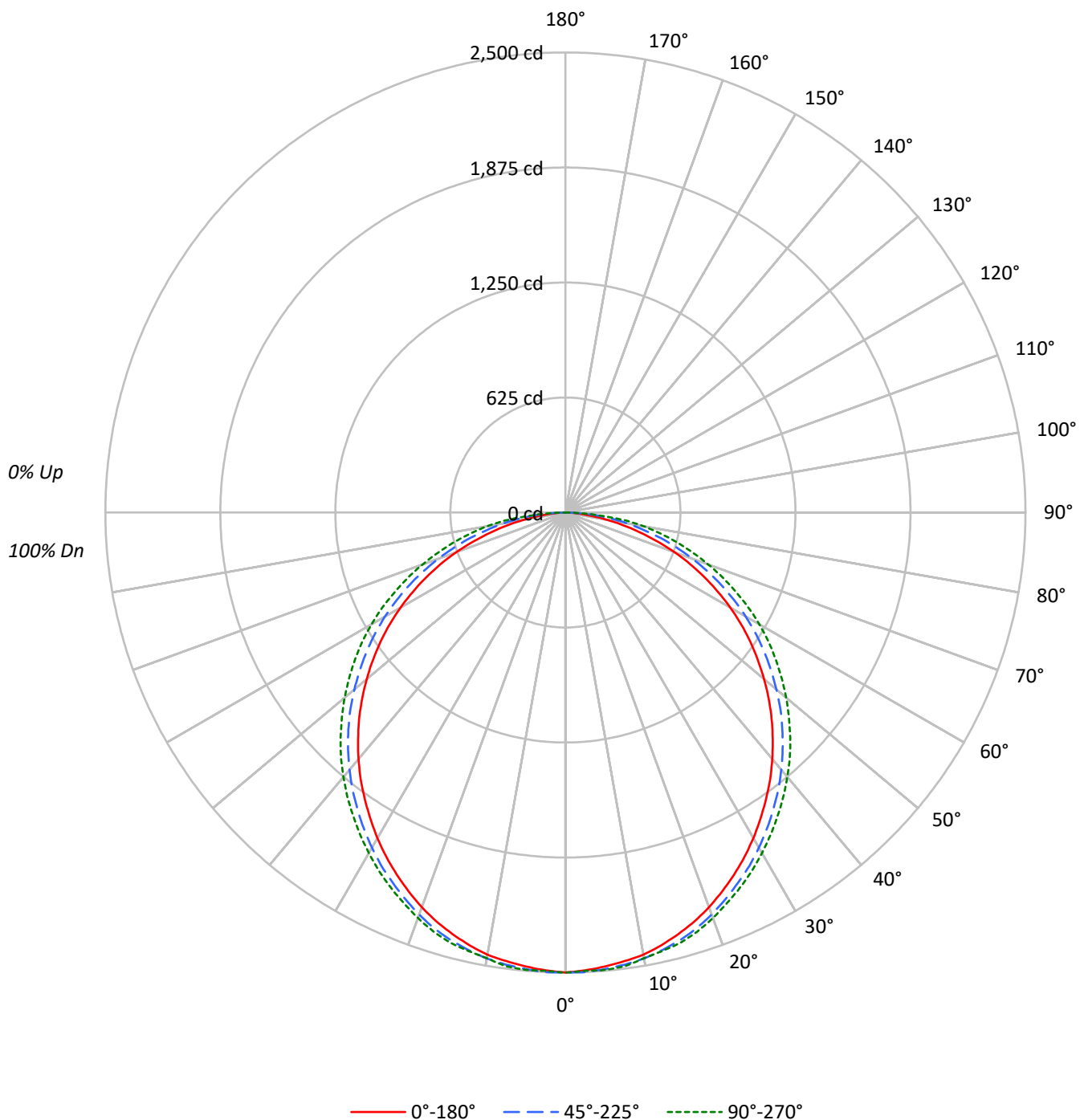
Lumens per Lamp: N/A  
Luminaire Lumens: 7272.0 lumens  
Efficiency: N/A  
Efficacy: 127.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 56.9  
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

TEST NUMBER: P1590012

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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 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 |
| 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°  | 3829 | 3829 | 3829 |
| 5°  | 3807 | 3829 | 3836 |
| 10° | 3795 | 3827 | 3825 |
| 15° | 3761 | 3815 | 3837 |
| 20° | 3720 | 3789 | 3822 |
| 25° | 3667 | 3751 | 3799 |
| 30° | 3613 | 3718 | 3779 |
| 35° | 3554 | 3683 | 3762 |
| 40° | 3497 | 3650 | 3750 |
| 45° | 3433 | 3612 | 3741 |
| 50° | 3359 | 3567 | 3731 |
| 55° | 3275 | 3522 | 3726 |
| 60° | 3172 | 3469 | 3728 |
| 65° | 3028 | 3396 | 3708 |
| 70° | 2830 | 3293 | 3699 |
| 75° | 2509 | 3166 | 3712 |
| 80° | 2042 | 3008 | 3822 |
| 85° | 1320 | 2777 | 3299 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3873 cd/sqm

TEST NUMBER: P1590012

CATALOG NUMBER: 24CZSP-SB-75VHE-L830-S

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 236.6  | 3.3       |
| 10°-20°   | 677.5  | 9.3       |
| 20°-30°   | 1021.4 | 14.0      |
| 30°-40°   | 1229.0 | 16.9      |
| 40°-50°   | 1282.0 | 17.6      |
| 50°-60°   | 1175.1 | 16.2      |
| 60°-70°   | 922.7  | 12.7      |
| 70°-80°   | 561.6  | 7.7       |
| 80°-90°   | 166.1  | 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°    | 1935.4 | 26.6      |
| 0°-40°    | 3164.5 | 43.5      |
| 0°-60°    | 5621.6 | 77.3      |
| 0°-90°    | 7272.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7272.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2500 | 2500  | 2500 | 2500  | 2500 |      |
| 5°  | 2476 | 2492  | 2490 | 2487  | 2495 | 235  |
| 15° | 2372 | 2395  | 2406 | 2409  | 2420 | 669  |
| 25° | 2170 | 2200  | 2220 | 2234  | 2248 | 1000 |
| 35° | 1901 | 1930  | 1970 | 1998  | 2012 | 1189 |
| 45° | 1585 | 1618  | 1668 | 1707  | 1727 | 1222 |
| 55° | 1226 | 1258  | 1319 | 1372  | 1395 | 1096 |
| 65° | 835  | 867   | 937  | 1000  | 1023 | 826  |
| 75° | 424  | 463   | 535  | 599   | 627  | 449  |
| 85° | 75   | 106   | 158  | 177   | 188  | 98   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1590012

CATALOG NUMBER: 24CZSP-SB-75VHE-L830-S

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2499.9 | 2499.9 | 2499.9 | 2499.9 | 2499.9 |
| 2.5°  | 2490.5 | 2503.0 | 2499.9 | 2488.9 | 2493.6 |
| 5°    | 2476.4 | 2492.0 | 2490.5 | 2487.3 | 2495.2 |
| 7.5°  | 2459.2 | 2476.4 | 2478.0 | 2478.0 | 2487.3 |
| 10°   | 2440.4 | 2457.6 | 2460.8 | 2456.1 | 2459.2 |
| 12.5° | 2409.1 | 2429.5 | 2435.7 | 2435.7 | 2440.4 |
| 15°   | 2371.6 | 2395.0 | 2406.0 | 2409.1 | 2420.1 |
| 17.5° | 2330.9 | 2355.9 | 2370.0 | 2377.8 | 2387.2 |
| 20°   | 2282.4 | 2309.0 | 2324.7 | 2334.0 | 2345.0 |
| 22.5° | 2227.7 | 2257.4 | 2274.6 | 2284.0 | 2296.5 |
| 25°   | 2169.8 | 2199.5 | 2219.8 | 2233.9 | 2248.0 |
| 27.5° | 2108.8 | 2136.9 | 2165.1 | 2182.3 | 2194.8 |
| 30°   | 2043.1 | 2072.8 | 2102.5 | 2124.4 | 2136.9 |
| 32.5° | 1972.7 | 2004.0 | 2038.4 | 2061.8 | 2075.9 |
| 35°   | 1900.7 | 1930.4 | 1969.5 | 1997.7 | 2011.8 |
| 37.5° | 1827.2 | 1858.5 | 1899.1 | 1928.9 | 1946.1 |
| 40°   | 1749.0 | 1781.8 | 1825.6 | 1858.5 | 1875.7 |
| 42.5° | 1667.6 | 1698.9 | 1747.4 | 1784.9 | 1805.3 |
| 45°   | 1584.7 | 1617.6 | 1667.6 | 1706.7 | 1727.1 |
| 47.5° | 1498.7 | 1530.0 | 1584.7 | 1630.1 | 1647.3 |
| 50°   | 1409.5 | 1439.2 | 1497.1 | 1545.6 | 1565.9 |
| 52.5° | 1318.8 | 1350.1 | 1407.9 | 1459.6 | 1481.5 |
| 55°   | 1226.5 | 1257.8 | 1318.8 | 1372.0 | 1395.4 |
| 57.5° | 1132.6 | 1163.9 | 1226.5 | 1281.2 | 1309.4 |
| 60°   | 1035.6 | 1066.9 | 1132.6 | 1188.9 | 1217.1 |
| 62.5° | 935.5  | 968.3  | 1035.6 | 1093.5 | 1123.2 |
| 65°   | 835.4  | 866.7  | 937.1  | 999.6  | 1023.1 |
| 67.5° | 735.3  | 766.5  | 835.4  | 897.9  | 926.1  |
| 70°   | 632.0  | 668.0  | 735.3  | 801.0  | 826.0  |
| 72.5° | 524.1  | 564.7  | 632.0  | 700.8  | 725.9  |
| 75°   | 423.9  | 463.1  | 535.0  | 599.2  | 627.3  |
| 77.5° | 325.4  | 367.6  | 434.9  | 500.6  | 528.8  |
| 80°   | 231.5  | 272.2  | 341.0  | 403.6  | 433.3  |
| 82.5° | 147.1  | 183.0  | 251.9  | 308.2  | 330.1  |
| 85°   | 75.1   | 106.4  | 158.0  | 176.8  | 187.7  |
| 87.5° | 21.9   | 37.5   | 56.3   | 70.4   | 78.2   |
| 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 | 16.2             | 17.8 | 16.5 | 18.1 | 18.5 | 16.9           | 18.6 | 17.3 | 18.9 | 19.2 |
|                 | 3H   | 17.9             | 19.4 | 18.3 | 19.8 | 20.1 | 19.0           | 20.5 | 19.4 | 20.8 | 21.2 |
|                 | 4H   | 18.6             | 20.0 | 18.9 | 20.3 | 20.7 | 19.8           | 21.3 | 20.2 | 21.6 | 22.0 |
|                 | 6H   | 19.0             | 20.3 | 19.4 | 20.6 | 21.0 | 20.6           | 21.9 | 21.0 | 22.3 | 22.7 |
|                 | 8H   | 19.1             | 20.3 | 19.5 | 20.7 | 21.1 | 20.9           | 22.1 | 21.3 | 22.5 | 22.9 |
|                 | 12H  | 19.1             | 20.3 | 19.5 | 20.7 | 21.1 | 21.1           | 22.3 | 21.5 | 22.7 | 23.1 |
| 4H              | 2H   | 16.9             | 18.4 | 17.3 | 18.7 | 19.1 | 17.5           | 18.9 | 17.9 | 19.3 | 19.6 |
|                 | 3H   | 18.9             | 20.1 | 19.3 | 20.5 | 20.9 | 19.8           | 21.0 | 20.2 | 21.4 | 21.8 |
|                 | 4H   | 19.7             | 20.7 | 20.1 | 21.2 | 21.6 | 20.8           | 21.9 | 21.3 | 22.3 | 22.8 |
|                 | 6H   | 20.2             | 21.1 | 20.6 | 21.6 | 22.0 | 21.7           | 22.7 | 22.2 | 23.1 | 23.6 |
|                 | 8H   | 20.3             | 21.2 | 20.8 | 21.7 | 22.1 | 22.1           | 23.0 | 22.6 | 23.4 | 23.9 |
|                 | 12H  | 20.4             | 21.2 | 20.9 | 21.7 | 22.2 | 22.4           | 23.2 | 22.8 | 23.6 | 24.1 |
| 8H              | 4H   | 20.1             | 21.0 | 20.6 | 21.4 | 21.9 | 21.1           | 22.0 | 21.6 | 22.5 | 22.9 |
|                 | 6H   | 20.8             | 21.5 | 21.3 | 22.0 | 22.5 | 22.2           | 22.9 | 22.7 | 23.4 | 23.9 |
|                 | 8H   | 21.0             | 21.7 | 21.5 | 22.2 | 22.6 | 22.7           | 23.3 | 23.2 | 23.8 | 24.3 |
|                 | 12H  | 21.1             | 21.7 | 21.6 | 22.2 | 22.8 | 23.0           | 23.6 | 23.5 | 24.1 | 24.7 |
| 12H             | 4H   | 20.2             | 21.0 | 20.7 | 21.5 | 21.9 | 21.2           | 22.0 | 21.6 | 22.4 | 22.9 |
|                 | 6H   | 20.9             | 21.6 | 21.4 | 22.0 | 22.6 | 22.3           | 22.9 | 22.8 | 23.4 | 23.9 |
|                 | 8H   | 21.2             | 21.8 | 21.7 | 22.3 | 22.8 | 22.8           | 23.4 | 23.3 | 23.9 | 24.4 |

(END OF REPORT)