

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P1588534

Luminaire Tested: 24CZSP-75VHE-L835-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1588534  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 24CZSP-75VHE-L835-S  
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 8000 lumens, 80CRI, Smooth Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

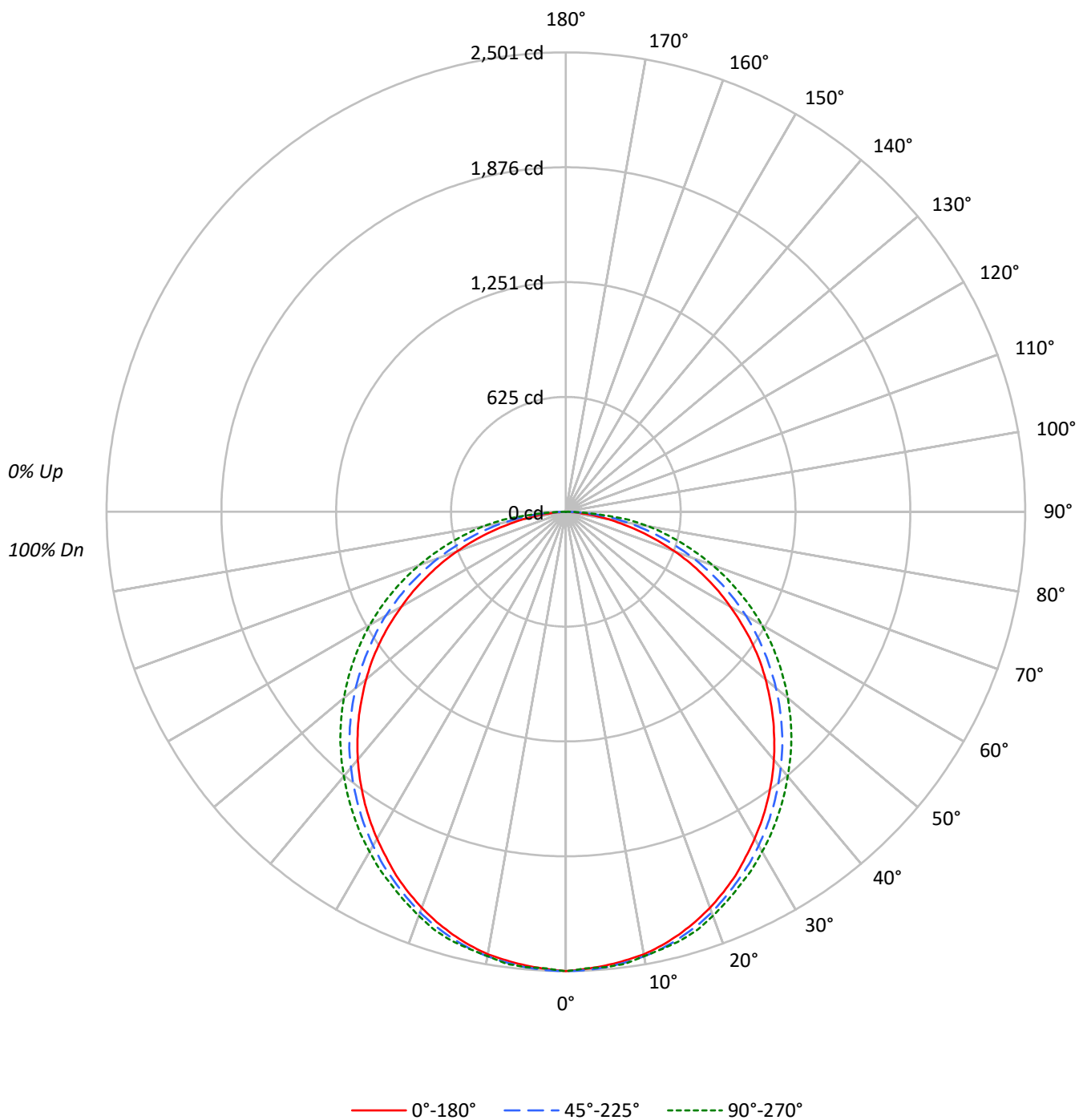
Lumens per Lamp: N/A  
Luminaire Lumens: 7302.0 lumens  
Efficiency: N/A  
Efficacy: 128.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

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: 24 FT

TEST NUMBER: P1588534

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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  | 69  |
| 3   | 89  | 79  | 70  | 64  | 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°  | 3831 | 3831 | 3831 |
| 5°  | 3813 | 3828 | 3826 |
| 10° | 3805 | 3823 | 3820 |
| 15° | 3778 | 3808 | 3831 |
| 20° | 3740 | 3784 | 3815 |
| 25° | 3693 | 3745 | 3791 |
| 30° | 3636 | 3712 | 3780 |
| 35° | 3583 | 3676 | 3769 |
| 40° | 3524 | 3639 | 3758 |
| 45° | 3457 | 3602 | 3762 |
| 50° | 3383 | 3558 | 3761 |
| 55° | 3294 | 3509 | 3765 |
| 60° | 3171 | 3470 | 3774 |
| 65° | 3025 | 3403 | 3786 |
| 70° | 2820 | 3308 | 3803 |
| 75° | 2513 | 3177 | 3840 |
| 80° | 2077 | 3024 | 4027 |
| 85° | 1351 | 2731 | 3520 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4155 cd/sqm

TEST NUMBER: P1588534

CATALOG NUMBER: 24CZSP-75VHE-L835-S

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 236.5  | 3.2       |
| 10°-20°   | 677.3  | 9.3       |
| 20°-30°   | 1021.5 | 14.0      |
| 30°-40°   | 1230.4 | 16.8      |
| 40°-50°   | 1284.9 | 17.6      |
| 50°-60°   | 1180.1 | 16.2      |
| 60°-70°   | 929.5  | 12.7      |
| 70°-80°   | 570.2  | 7.8       |
| 80°-90°   | 171.6  | 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°    | 1935.4 | 26.5      |
| 0°-40°    | 3165.7 | 43.4      |
| 0°-60°    | 5630.7 | 77.1      |
| 0°-90°    | 7302.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7302.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2501 | 2501  | 2501 | 2501  | 2501 |      |
| 5°  | 2480 | 2484  | 2490 | 2498  | 2488 | 236  |
| 15° | 2383 | 2387  | 2402 | 2416  | 2416 | 672  |
| 25° | 2186 | 2190  | 2216 | 2243  | 2243 | 1006 |
| 35° | 1916 | 1926  | 1966 | 2006  | 2016 | 1199 |
| 45° | 1596 | 1614  | 1663 | 1721  | 1737 | 1230 |
| 55° | 1234 | 1256  | 1314 | 1388  | 1410 | 1101 |
| 65° | 835  | 864   | 939  | 1017  | 1045 | 826  |
| 75° | 425  | 458   | 537  | 622   | 649  | 450  |
| 85° | 77   | 106   | 155  | 197   | 200  | 100  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1588534

CATALOG NUMBER: 24CZSP-75VHE-L835-S

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2501.1 | 2501.1 | 2501.1 | 2501.1 | 2501.1 |
| 2.5°  | 2491.5 | 2496.3 | 2497.9 | 2499.5 | 2488.3 |
| 5°    | 2480.3 | 2483.5 | 2489.9 | 2497.9 | 2488.3 |
| 7.5°  | 2464.3 | 2467.5 | 2475.5 | 2486.7 | 2481.9 |
| 10°   | 2446.7 | 2448.3 | 2457.9 | 2465.9 | 2456.3 |
| 12.5° | 2417.8 | 2422.6 | 2433.8 | 2440.2 | 2437.0 |
| 15°   | 2382.6 | 2387.4 | 2401.8 | 2416.2 | 2416.2 |
| 17.5° | 2340.9 | 2347.3 | 2364.9 | 2384.2 | 2385.8 |
| 20°   | 2294.4 | 2299.2 | 2321.7 | 2340.9 | 2340.9 |
| 22.5° | 2241.6 | 2248.0 | 2270.4 | 2291.2 | 2294.4 |
| 25°   | 2185.5 | 2190.3 | 2215.9 | 2243.2 | 2243.2 |
| 27.5° | 2119.8 | 2129.4 | 2161.5 | 2188.7 | 2195.1 |
| 30°   | 2055.7 | 2063.7 | 2099.0 | 2132.6 | 2137.4 |
| 32.5° | 1988.4 | 1998.0 | 2034.9 | 2071.7 | 2079.7 |
| 35°   | 1916.3 | 1925.9 | 1966.0 | 2006.0 | 2015.6 |
| 37.5° | 1841.0 | 1852.2 | 1893.9 | 1940.3 | 1950.0 |
| 40°   | 1762.5 | 1775.3 | 1820.2 | 1869.8 | 1879.5 |
| 42.5° | 1679.2 | 1696.8 | 1744.9 | 1796.1 | 1810.6 |
| 45°   | 1595.9 | 1613.5 | 1663.1 | 1720.8 | 1736.9 |
| 47.5° | 1507.7 | 1528.6 | 1579.8 | 1640.7 | 1658.3 |
| 50°   | 1419.6 | 1440.4 | 1493.3 | 1559.0 | 1578.2 |
| 52.5° | 1329.9 | 1350.7 | 1405.2 | 1474.1 | 1494.9 |
| 55°   | 1233.7 | 1256.2 | 1313.9 | 1387.6 | 1410.0 |
| 57.5° | 1134.4 | 1163.2 | 1224.1 | 1299.4 | 1321.9 |
| 60°   | 1035.1 | 1063.9 | 1132.8 | 1206.5 | 1232.1 |
| 62.5° | 937.3  | 964.6  | 1035.1 | 1113.6 | 1140.8 |
| 65°   | 834.8  | 863.6  | 938.9  | 1017.4 | 1044.7 |
| 67.5° | 733.8  | 762.7  | 838.0  | 919.7  | 948.5  |
| 70°   | 629.7  | 661.7  | 738.6  | 820.4  | 849.2  |
| 72.5° | 525.5  | 559.2  | 637.7  | 721.0  | 748.3  |
| 75°   | 424.6  | 458.2  | 536.8  | 621.7  | 648.9  |
| 77.5° | 325.3  | 362.1  | 439.0  | 525.5  | 551.2  |
| 80°   | 235.5  | 270.8  | 342.9  | 427.8  | 456.6  |
| 82.5° | 150.6  | 181.1  | 253.2  | 333.3  | 354.1  |
| 85°   | 76.9   | 105.7  | 155.4  | 197.1  | 200.3  |
| 87.5° | 24.0   | 33.6   | 51.3   | 76.9   | 78.5   |
| 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 | 16.14            | 17.81 | 16.51 | 18.12 | 18.43 | 16.97          | 18.64 | 17.34 | 18.95 | 19.27 |
|                 | 3H   | 17.90            | 19.41 | 18.28 | 19.73 | 20.09 | 19.09          | 20.60 | 19.47 | 20.92 | 21.28 |
|                 | 4H   | 18.52            | 19.94 | 18.92 | 20.29 | 20.66 | 19.98          | 21.40 | 20.38 | 21.75 | 22.12 |
|                 | 6H   | 18.93            | 20.25 | 19.34 | 20.61 | 21.00 | 20.76          | 22.08 | 21.17 | 22.45 | 22.84 |
|                 | 8H   | 19.04            | 20.30 | 19.46 | 20.69 | 21.09 | 21.08          | 22.34 | 21.50 | 22.73 | 23.13 |
|                 | 12H  | 19.09            | 20.30 | 19.52 | 20.68 | 21.11 | 21.29          | 22.50 | 21.72 | 22.88 | 23.31 |
| 4H              | 2H   | 16.92            | 18.34 | 17.31 | 18.69 | 19.06 | 17.56          | 18.98 | 17.96 | 19.33 | 19.71 |
|                 | 3H   | 18.89            | 20.09 | 19.30 | 20.49 | 20.89 | 19.92          | 21.12 | 20.33 | 21.51 | 21.91 |
|                 | 4H   | 19.63            | 20.72 | 20.06 | 21.13 | 21.56 | 20.97          | 22.06 | 21.40 | 22.47 | 22.90 |
|                 | 6H   | 20.16            | 21.11 | 20.61 | 21.55 | 22.00 | 21.92          | 22.87 | 22.37 | 23.31 | 23.77 |
|                 | 8H   | 20.30            | 21.20 | 20.76 | 21.64 | 22.10 | 22.32          | 23.21 | 22.78 | 23.65 | 24.12 |
|                 | 12H  | 20.39            | 21.19 | 20.87 | 21.67 | 22.13 | 22.60          | 23.40 | 23.07 | 23.87 | 24.34 |
| 8H              | 4H   | 20.09            | 20.98 | 20.55 | 21.42 | 21.89 | 21.26          | 22.15 | 21.72 | 22.59 | 23.06 |
|                 | 6H   | 20.75            | 21.49 | 21.24 | 21.98 | 22.45 | 22.37          | 23.11 | 22.86 | 23.60 | 24.08 |
|                 | 8H   | 20.96            | 21.63 | 21.47 | 22.13 | 22.62 | 22.88          | 23.55 | 23.39 | 24.06 | 24.54 |
|                 | 12H  | 21.10            | 21.69 | 21.61 | 22.18 | 22.74 | 23.27          | 23.86 | 23.77 | 24.35 | 24.91 |
| 12H             | 4H   | 20.18            | 20.98 | 20.66 | 21.46 | 21.92 | 21.28          | 22.09 | 21.76 | 22.56 | 23.03 |
|                 | 6H   | 20.88            | 21.55 | 21.39 | 22.06 | 22.54 | 22.42          | 23.09 | 22.92 | 23.59 | 24.08 |
|                 | 8H   | 21.16            | 21.75 | 21.67 | 22.24 | 22.80 | 23.00          | 23.59 | 23.50 | 24.08 | 24.64 |