

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: P1588436

Luminaire Tested: 24CZSP-62-L840-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1588436  
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-62-L840-S  
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5500 lumens, 80CRI, Smooth Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

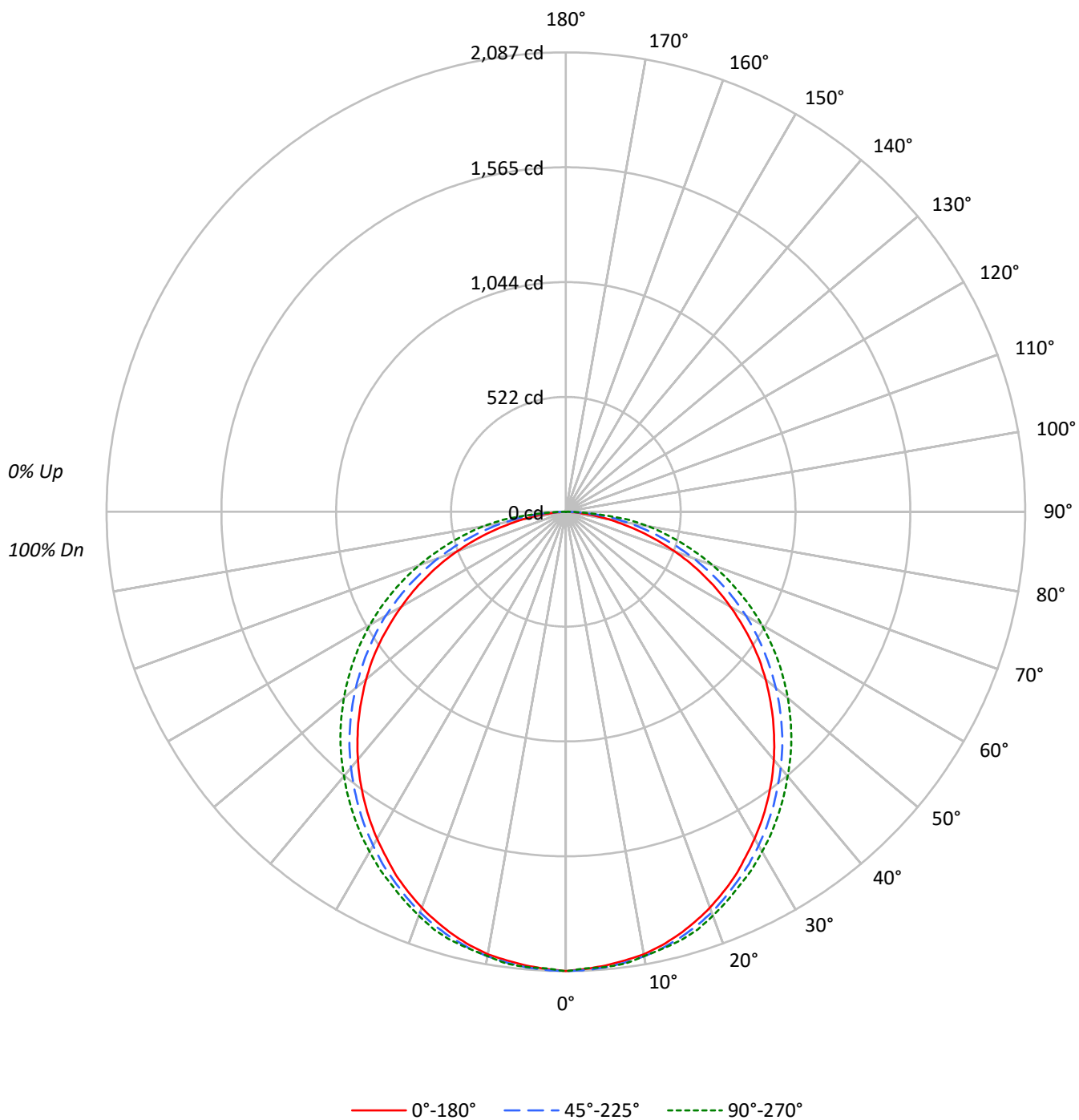
Lumens per Lamp: N/A  
Luminaire Lumens: 6092.0 lumens  
Efficiency: N/A  
Efficacy: 136.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 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: 24 FT

TEST NUMBER: P1588436

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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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 88  |  | 89  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  |
| 3   | 89  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 61  |  | 69  |
| 4   | 82  | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 52  |  | 63  | 57  | 52  |  | 61  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  |  | 57  | 50  | 45  |  | 55  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  |  | 51  | 44  | 39  |  | 50  |
| 7   | 64  | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  |  | 47  | 40  | 35  |  | 45  |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  |  | 37  | 30  | 25  |  | 36  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3196 | 3196 | 3196 |
| 5°  | 3182 | 3194 | 3192 |
| 10° | 3175 | 3189 | 3187 |
| 15° | 3152 | 3177 | 3196 |
| 20° | 3120 | 3157 | 3183 |
| 25° | 3081 | 3124 | 3163 |
| 30° | 3033 | 3097 | 3154 |
| 35° | 2989 | 3067 | 3144 |
| 40° | 2940 | 3036 | 3135 |
| 45° | 2884 | 3006 | 3139 |
| 50° | 2822 | 2969 | 3137 |
| 55° | 2749 | 2927 | 3141 |
| 60° | 2645 | 2895 | 3149 |
| 65° | 2524 | 2839 | 3159 |
| 70° | 2352 | 2759 | 3173 |
| 75° | 2096 | 2650 | 3204 |
| 80° | 1733 | 2523 | 3361 |
| 85° | 1128 | 2279 | 2937 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3466 cd/sqm

TEST NUMBER: P1588436

CATALOG NUMBER: 24CZSP-62-L840-S

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 197.3  | 3.2       |
| 10°-20°   | 565.1  | 9.3       |
| 20°-30°   | 852.2  | 14.0      |
| 30°-40°   | 1026.5 | 16.8      |
| 40°-50°   | 1072.0 | 17.6      |
| 50°-60°   | 984.5  | 16.2      |
| 60°-70°   | 775.4  | 12.7      |
| 70°-80°   | 475.7  | 7.8       |
| 80°-90°   | 143.2  | 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°    | 1614.7 | 26.5      |
| 0°-40°    | 2641.1 | 43.4      |
| 0°-60°    | 4697.7 | 77.1      |
| 0°-90°    | 6092.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6092.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2087 | 2087  | 2087 | 2087  | 2087 |      |
| 5°  | 2069 | 2072  | 2077 | 2084  | 2076 | 197  |
| 15° | 1988 | 1992  | 2004 | 2016  | 2016 | 561  |
| 25° | 1823 | 1827  | 1849 | 1872  | 1872 | 839  |
| 35° | 1599 | 1607  | 1640 | 1674  | 1682 | 1000 |
| 45° | 1331 | 1346  | 1388 | 1436  | 1449 | 1027 |
| 55° | 1029 | 1048  | 1096 | 1158  | 1176 | 919  |
| 65° | 696  | 720   | 783  | 849   | 872  | 689  |
| 75° | 354  | 382   | 448  | 519   | 541  | 376  |
| 85° | 64   | 88    | 130  | 164   | 167  | 84   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1588436

CATALOG NUMBER: 24CZSP-62-L840-S

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2086.7 | 2086.7 | 2086.7 | 2086.7 | 2086.7 |
| 2.5°  | 2078.7 | 2082.7 | 2084.0 | 2085.3 | 2076.0 |
| 5°    | 2069.3 | 2072.0 | 2077.3 | 2084.0 | 2076.0 |
| 7.5°  | 2055.9 | 2058.6 | 2065.3 | 2074.6 | 2070.6 |
| 10°   | 2041.2 | 2042.6 | 2050.6 | 2057.3 | 2049.2 |
| 12.5° | 2017.2 | 2021.2 | 2030.5 | 2035.9 | 2033.2 |
| 15°   | 1987.8 | 1991.8 | 2003.8 | 2015.8 | 2015.8 |
| 17.5° | 1953.0 | 1958.3 | 1973.0 | 1989.1 | 1990.4 |
| 20°   | 1914.2 | 1918.2 | 1937.0 | 1953.0 | 1953.0 |
| 22.5° | 1870.1 | 1875.5 | 1894.2 | 1911.6 | 1914.2 |
| 25°   | 1823.3 | 1827.3 | 1848.7 | 1871.5 | 1871.5 |
| 27.5° | 1768.5 | 1776.5 | 1803.3 | 1826.0 | 1831.4 |
| 30°   | 1715.1 | 1721.7 | 1751.1 | 1779.2 | 1783.2 |
| 32.5° | 1658.9 | 1666.9 | 1697.7 | 1728.4 | 1735.1 |
| 35°   | 1598.8 | 1606.8 | 1640.2 | 1673.6 | 1681.6 |
| 37.5° | 1535.9 | 1545.3 | 1580.0 | 1618.8 | 1626.8 |
| 40°   | 1470.4 | 1481.1 | 1518.6 | 1560.0 | 1568.0 |
| 42.5° | 1400.9 | 1415.6 | 1455.7 | 1498.5 | 1510.5 |
| 45°   | 1331.4 | 1346.1 | 1387.6 | 1435.7 | 1449.0 |
| 47.5° | 1257.9 | 1275.3 | 1318.0 | 1368.8 | 1383.5 |
| 50°   | 1184.4 | 1201.7 | 1245.9 | 1300.7 | 1316.7 |
| 52.5° | 1109.5 | 1126.9 | 1172.3 | 1229.8 | 1247.2 |
| 55°   | 1029.3 | 1048.0 | 1096.1 | 1157.6 | 1176.3 |
| 57.5° | 946.4  | 970.5  | 1021.3 | 1084.1 | 1102.8 |
| 60°   | 863.5  | 887.6  | 945.1  | 1006.6 | 1028.0 |
| 62.5° | 782.0  | 804.7  | 863.5  | 929.0  | 951.8  |
| 65°   | 696.4  | 720.5  | 783.3  | 848.8  | 871.6  |
| 67.5° | 612.2  | 636.3  | 699.1  | 767.3  | 791.4  |
| 70°   | 525.3  | 552.1  | 616.2  | 684.4  | 708.5  |
| 72.5° | 438.5  | 466.5  | 532.0  | 601.5  | 624.3  |
| 75°   | 354.2  | 382.3  | 447.8  | 518.7  | 541.4  |
| 77.5° | 271.4  | 302.1  | 366.3  | 438.5  | 459.8  |
| 80°   | 196.5  | 225.9  | 286.1  | 356.9  | 381.0  |
| 82.5° | 125.7  | 151.1  | 211.2  | 278.0  | 295.4  |
| 85°   | 64.2   | 88.2   | 129.7  | 164.4  | 167.1  |
| 87.5° | 20.1   | 28.1   | 42.8   | 64.2   | 65.5   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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CATALOG NUMBER: 24CZSP-62-L840-S

**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 | 15.51            | 17.18 | 15.88 | 17.49 | 17.81 | 16.34          | 18.01 | 16.71 | 18.32 | 18.64 |
|                 | 3H   | 17.27            | 18.78 | 17.65 | 19.10 | 19.46 | 18.46          | 19.97 | 18.84 | 20.30 | 20.65 |
|                 | 4H   | 17.89            | 19.31 | 18.29 | 19.66 | 20.03 | 19.35          | 20.77 | 19.75 | 21.12 | 21.49 |
|                 | 6H   | 18.30            | 19.62 | 18.71 | 19.98 | 20.37 | 20.13          | 21.45 | 20.54 | 21.82 | 22.21 |
|                 | 8H   | 18.41            | 19.67 | 18.83 | 20.06 | 20.46 | 20.45          | 21.71 | 20.88 | 22.10 | 22.50 |
|                 | 12H  | 18.46            | 19.67 | 18.89 | 20.05 | 20.48 | 20.66          | 21.87 | 21.09 | 22.25 | 22.68 |
| 4H              | 2H   | 16.29            | 17.71 | 16.68 | 18.06 | 18.43 | 16.93          | 18.36 | 17.33 | 18.70 | 19.08 |
|                 | 3H   | 18.26            | 19.46 | 18.67 | 19.86 | 20.26 | 19.29          | 20.49 | 19.70 | 20.88 | 21.28 |
|                 | 4H   | 19.00            | 20.09 | 19.43 | 20.50 | 20.93 | 20.34          | 21.43 | 20.77 | 21.84 | 22.27 |
|                 | 6H   | 19.53            | 20.48 | 19.98 | 20.92 | 21.37 | 21.29          | 22.24 | 21.75 | 22.68 | 23.14 |
|                 | 8H   | 19.68            | 20.57 | 20.13 | 21.01 | 21.47 | 21.69          | 22.58 | 22.15 | 23.02 | 23.49 |
|                 | 12H  | 19.76            | 20.56 | 20.24 | 21.04 | 21.51 | 21.97          | 22.77 | 22.45 | 23.24 | 23.71 |
| 8H              | 4H   | 19.46            | 20.35 | 19.92 | 20.79 | 21.26 | 20.63          | 21.52 | 21.09 | 21.96 | 22.43 |
|                 | 6H   | 20.12            | 20.87 | 20.61 | 21.35 | 21.83 | 21.74          | 22.49 | 22.23 | 22.97 | 23.45 |
|                 | 8H   | 20.33            | 21.00 | 20.84 | 21.50 | 21.99 | 22.25          | 22.92 | 22.76 | 23.43 | 23.91 |
|                 | 12H  | 20.47            | 21.06 | 20.98 | 21.55 | 22.11 | 22.64          | 23.23 | 23.14 | 23.72 | 24.28 |
| 12H             | 4H   | 19.55            | 20.35 | 20.03 | 20.83 | 21.30 | 20.65          | 21.46 | 21.13 | 21.93 | 22.40 |
|                 | 6H   | 20.25            | 20.92 | 20.76 | 21.43 | 21.91 | 21.79          | 22.46 | 22.30 | 22.96 | 23.45 |
|                 | 8H   | 20.53            | 21.12 | 21.04 | 21.61 | 22.17 | 22.37          | 22.96 | 22.87 | 23.45 | 24.01 |