

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: P1588717

Luminaire Tested: 24CZSP-A-57-L840

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1588717  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 24CZSP-A-57-L840  
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 80CRI, Ribbed Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

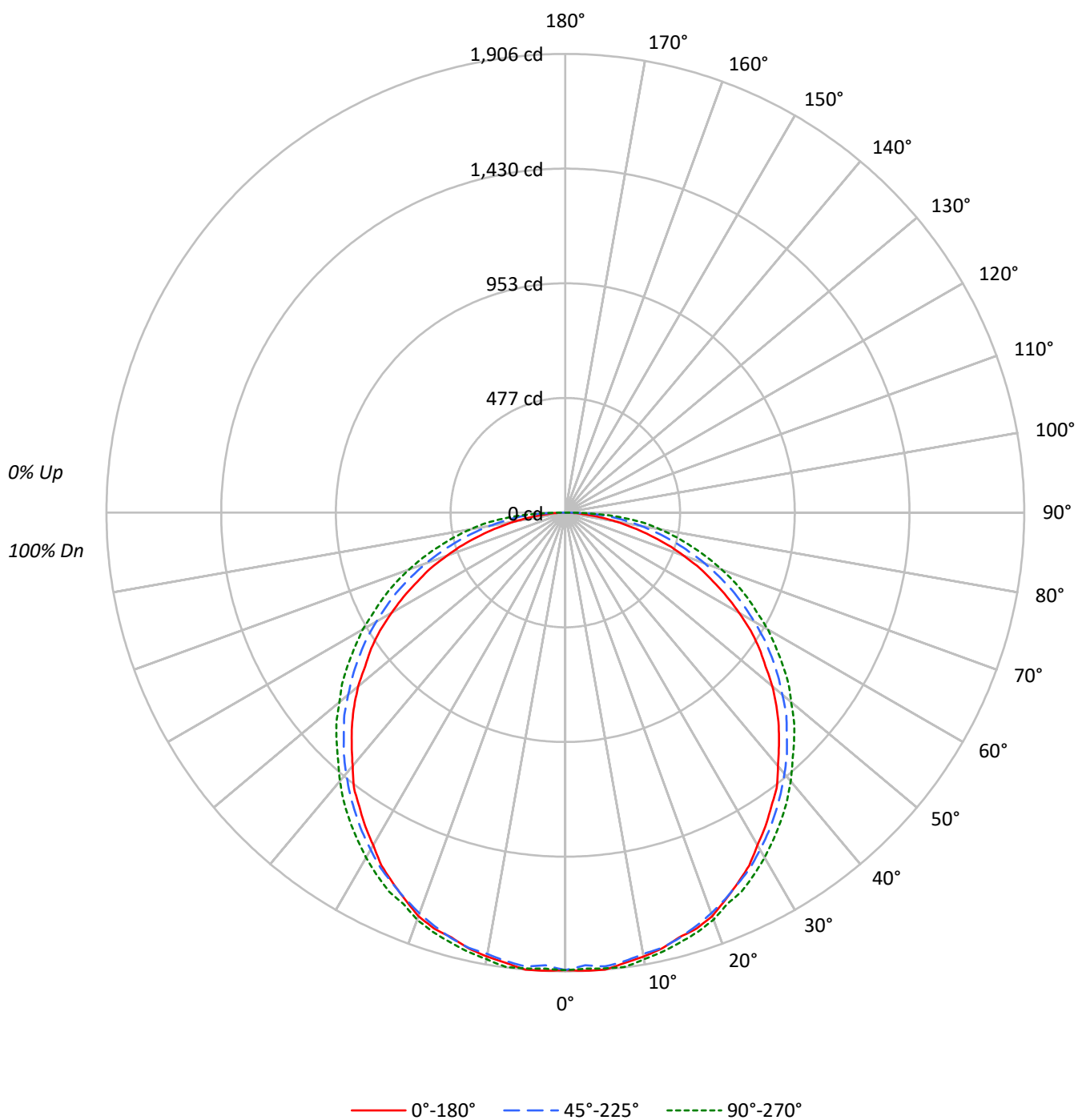
Lumens per Lamp: N/A  
Luminaire Lumens: 5802.0 lumens  
Efficiency: N/A  
Efficacy: 141.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 40.9  
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: P1588717

CATALOG NUMBER: 24CZSP-A-57-L840

### Luminous Intensity Polar Plot



TEST NUMBER: P1588717

CATALOG NUMBER: 24CZSP-A-57-L840

**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 | 98  | 94  | 105 | 100 | 96  | 92  | 96  | 93  | 89  |  | 92  | 89  | 87  |  | 89  |
| 2   | 98  | 89  | 82  | 76  | 95  | 87  | 80  | 75  | 83  | 78  | 73  |  | 80  | 75  | 71  |  | 77  |
| 3   | 89  | 78  | 69  | 62  | 86  | 76  | 68  | 62  | 73  | 66  | 61  |  | 70  | 64  | 60  |  | 68  |
| 4   | 81  | 69  | 60  | 53  | 79  | 67  | 59  | 52  | 65  | 57  | 51  |  | 62  | 56  | 51  |  | 60  |
| 5   | 74  | 61  | 52  | 45  | 72  | 60  | 51  | 45  | 58  | 50  | 44  |  | 56  | 49  | 44  |  | 54  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 45  | 39  | 52  | 44  | 39  |  | 50  | 44  | 38  |  | 49  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 40  | 34  | 47  | 40  | 34  |  | 46  | 39  | 34  |  | 45  |
| 8   | 59  | 45  | 37  | 31  | 58  | 45  | 36  | 31  | 43  | 36  | 30  |  | 42  | 35  | 30  |  | 41  |
| 9   | 55  | 42  | 33  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 27  |  | 39  | 32  | 27  |  | 38  |
| 10  | 52  | 38  | 30  | 25  | 51  | 38  | 30  | 25  | 37  | 30  | 25  |  | 36  | 29  | 25  |  | 35  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2911 | 2911 | 2911 |
| 5°  | 2931 | 2910 | 2923 |
| 10° | 2913 | 2896 | 2930 |
| 15° | 2897 | 2902 | 2930 |
| 20° | 2908 | 2888 | 2933 |
| 25° | 2867 | 2872 | 2933 |
| 30° | 2821 | 2860 | 2927 |
| 35° | 2788 | 2845 | 2920 |
| 40° | 2748 | 2831 | 2912 |
| 45° | 2715 | 2817 | 2911 |
| 50° | 2675 | 2804 | 2917 |
| 55° | 2627 | 2794 | 2942 |
| 60° | 2554 | 2775 | 2975 |
| 65° | 2452 | 2775 | 3021 |
| 70° | 2340 | 2757 | 3093 |
| 75° | 2155 | 2763 | 3207 |
| 80° | 1888 | 2819 | 3530 |
| 85° | 1441 | 3248 | 4225 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 4684 cd/sqm

TEST NUMBER: P1588717

CATALOG NUMBER: 24CZSP-A-57-L840

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 180.5  | 3.1       |
| 10°-20°   | 518.8  | 8.9       |
| 20°-30°   | 788.1  | 13.6      |
| 30°-40°   | 954.7  | 16.5      |
| 40°-50°   | 1004.4 | 17.3      |
| 50°-60°   | 933.9  | 16.1      |
| 60°-70°   | 751.9  | 13.0      |
| 70°-80°   | 487.1  | 8.4       |
| 80°-90°   | 182.7  | 3.1       |
| 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°    | 1487.4 | 25.6      |
| 0°-40°    | 2442.1 | 42.1      |
| 0°-60°    | 4380.3 | 75.5      |
| 0°-90°    | 5802.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5802.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1901 | 1901  | 1901 | 1901  | 1901 |      |
| 5°  | 1906 | 1904  | 1892 | 1904  | 1901 | 181  |
| 15° | 1827 | 1834  | 1830 | 1852  | 1848 | 518  |
| 25° | 1697 | 1695  | 1699 | 1729  | 1736 | 782  |
| 35° | 1491 | 1502  | 1522 | 1548  | 1562 | 934  |
| 45° | 1253 | 1270  | 1301 | 1328  | 1344 | 966  |
| 55° | 984  | 1009  | 1046 | 1088  | 1102 | 877  |
| 65° | 677  | 707   | 766  | 812   | 834  | 673  |
| 75° | 364  | 400   | 467  | 521   | 542  | 387  |
| 85° | 82   | 121   | 185  | 231   | 240  | 101  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1588717

CATALOG NUMBER: 24CZSP-A-57-L840

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1900.9 | 1900.9 | 1900.9 | 1900.9 | 1900.9 |
| 2.5°  | 1905.0 | 1905.0 | 1882.8 | 1906.4 | 1896.7 |
| 5°    | 1906.4 | 1903.6 | 1892.5 | 1903.6 | 1900.9 |
| 7.5°  | 1887.0 | 1889.8 | 1880.0 | 1893.9 | 1903.6 |
| 10°   | 1873.1 | 1875.9 | 1862.0 | 1884.2 | 1884.2 |
| 12.5° | 1855.0 | 1857.8 | 1852.2 | 1873.1 | 1868.9 |
| 15°   | 1827.2 | 1834.2 | 1830.0 | 1852.2 | 1848.1 |
| 17.5° | 1811.9 | 1806.4 | 1802.2 | 1818.9 | 1827.2 |
| 20°   | 1784.1 | 1771.6 | 1771.6 | 1793.9 | 1799.4 |
| 22.5° | 1739.7 | 1735.5 | 1736.9 | 1764.7 | 1759.1 |
| 25°   | 1696.6 | 1695.2 | 1699.4 | 1728.6 | 1735.5 |
| 27.5° | 1653.5 | 1650.8 | 1663.3 | 1691.0 | 1696.6 |
| 30°   | 1595.2 | 1600.7 | 1617.4 | 1648.0 | 1654.9 |
| 32.5° | 1546.5 | 1556.3 | 1571.5 | 1600.7 | 1609.1 |
| 35°   | 1491.0 | 1502.1 | 1521.5 | 1547.9 | 1561.8 |
| 37.5° | 1442.3 | 1449.3 | 1470.1 | 1495.1 | 1511.8 |
| 40°   | 1374.2 | 1392.3 | 1415.9 | 1452.1 | 1456.2 |
| 42.5° | 1313.1 | 1331.2 | 1361.7 | 1400.6 | 1396.5 |
| 45°   | 1253.3 | 1270.0 | 1300.6 | 1328.4 | 1343.7 |
| 47.5° | 1189.4 | 1204.7 | 1245.0 | 1278.4 | 1289.5 |
| 50°   | 1122.7 | 1142.2 | 1176.9 | 1211.7 | 1224.2 |
| 52.5° | 1047.7 | 1068.5 | 1113.0 | 1150.5 | 1168.6 |
| 55°   | 983.8  | 1008.8 | 1046.3 | 1088.0 | 1101.9 |
| 57.5° | 912.9  | 933.8  | 979.6  | 1021.3 | 1035.2 |
| 60°   | 833.7  | 858.7  | 906.0  | 950.4  | 971.3  |
| 62.5° | 757.3  | 785.1  | 835.1  | 881.0  | 897.6  |
| 65°   | 676.7  | 707.3  | 765.6  | 811.5  | 833.7  |
| 67.5° | 607.2  | 632.2  | 689.2  | 740.6  | 764.2  |
| 70°   | 522.5  | 555.8  | 615.6  | 672.5  | 690.6  |
| 72.5° | 447.4  | 476.6  | 539.1  | 596.1  | 618.3  |
| 75°   | 364.1  | 400.2  | 466.9  | 521.1  | 541.9  |
| 77.5° | 287.6  | 325.1  | 391.8  | 448.8  | 472.4  |
| 80°   | 214.0  | 250.1  | 319.6  | 378.0  | 400.2  |
| 82.5° | 144.5  | 180.6  | 250.1  | 307.1  | 332.1  |
| 85°   | 82.0   | 120.9  | 184.8  | 230.7  | 240.4  |
| 87.5° | 36.1   | 69.5   | 104.2  | 125.1  | 133.4  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1588717

CATALOG NUMBER: 24CZSP-A-57-L840

**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 | 15.40            | 17.08 | 15.76 | 17.39 | 17.71 | 16.07          | 17.75 | 16.44 | 18.07 | 18.38 |
|                 | 3H   | 17.25            | 18.78 | 17.63 | 19.11 | 19.46 | 18.29          | 19.82 | 18.67 | 20.14 | 20.50 |
|                 | 4H   | 17.94            | 19.38 | 18.34 | 19.73 | 20.10 | 19.25          | 20.70 | 19.65 | 21.04 | 21.42 |
|                 | 6H   | 18.43            | 19.77 | 18.84 | 20.14 | 20.53 | 20.14          | 21.49 | 20.55 | 21.85 | 22.24 |
|                 | 8H   | 18.58            | 19.86 | 19.00 | 20.25 | 20.65 | 20.55          | 21.83 | 20.97 | 22.22 | 22.62 |
|                 | 12H  | 18.67            | 19.90 | 19.09 | 20.28 | 20.71 | 20.91          | 22.14 | 21.34 | 22.52 | 22.95 |
| 4H              | 2H   | 16.19            | 17.63 | 16.59 | 17.98 | 18.36 | 16.71          | 18.15 | 17.11 | 18.50 | 18.88 |
|                 | 3H   | 18.28            | 19.50 | 18.69 | 19.90 | 20.29 | 19.17          | 20.39 | 19.58 | 20.79 | 21.19 |
|                 | 4H   | 19.10            | 20.21 | 19.53 | 20.62 | 21.05 | 20.30          | 21.41 | 20.73 | 21.82 | 22.25 |
|                 | 6H   | 19.72            | 20.70 | 20.17 | 21.14 | 21.59 | 21.37          | 22.34 | 21.82 | 22.78 | 23.24 |
|                 | 8H   | 19.92            | 20.84 | 20.38 | 21.28 | 21.74 | 21.86          | 22.77 | 22.32 | 23.22 | 23.68 |
|                 | 12H  | 20.05            | 20.88 | 20.53 | 21.35 | 21.82 | 22.31          | 23.14 | 22.79 | 23.61 | 24.08 |
| 8H              | 4H   | 19.61            | 20.52 | 20.06 | 20.96 | 21.43 | 20.64          | 21.56 | 21.10 | 22.00 | 22.46 |
|                 | 6H   | 20.39            | 21.16 | 20.88 | 21.64 | 22.12 | 21.89          | 22.66 | 22.38 | 23.14 | 23.62 |
|                 | 8H   | 20.68            | 21.37 | 21.18 | 21.87 | 22.35 | 22.51          | 23.20 | 23.02 | 23.71 | 24.19 |
|                 | 12H  | 20.89            | 21.50 | 21.40 | 21.99 | 22.55 | 23.13          | 23.74 | 23.63 | 24.23 | 24.78 |
| 12H             | 4H   | 19.71            | 20.54 | 20.19 | 21.01 | 21.48 | 20.68          | 21.51 | 21.16 | 21.98 | 22.45 |
|                 | 6H   | 20.56            | 21.25 | 21.06 | 21.75 | 22.24 | 21.97          | 22.66 | 22.47 | 23.16 | 23.64 |
|                 | 8H   | 20.93            | 21.54 | 21.43 | 22.03 | 22.59 | 22.67          | 23.28 | 23.17 | 23.77 | 24.33 |