

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: P1585800

Luminaire Tested: 14CZSP-SB-54VHE-L850-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1585800  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 14CZSP-SB-54VHE-L850-S  
Description: 1x4 CZSP LED Luminaire, 5000K CCT and 5200 lumens, 80CRI, Smooth Lens, SB housing  
Light Source: -  
Ballast/Driver: -

**Summary**

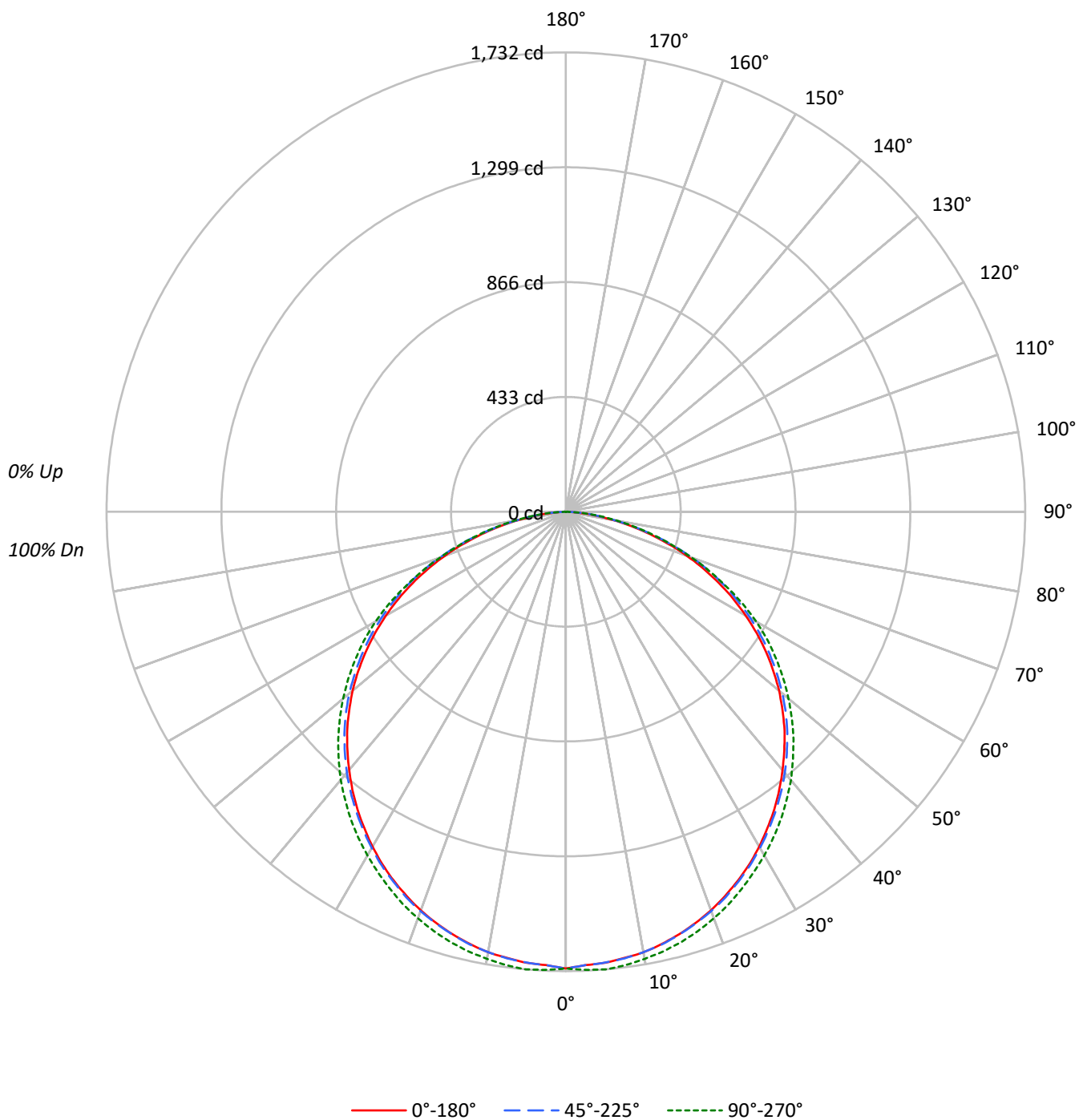
Lumens per Lamp: N/A  
Luminaire Lumens: 5081.0 lumens  
Efficiency: N/A  
Efficacy: 135.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 37.5  
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: P1585800

CATALOG NUMBER: 14CZSP-SB-54VHE-L850-S

### Luminous Intensity Polar Plot



TEST NUMBER: P1585800

CATALOG NUMBER: 14CZSP-SB-54VHE-L850-S

**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   | 109 | 104 | 99  | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  |  | 93  | 91  | 88  |  | 90  |
| 2   | 99  | 90  | 83  | 77  | 96  | 88  | 82  | 77  | 85  | 79  | 75  |  | 81  | 77  | 73  |  | 78  |
| 3   | 90  | 79  | 71  | 64  | 87  | 77  | 70  | 64  | 74  | 68  | 62  |  | 72  | 66  | 61  |  | 69  |
| 4   | 82  | 70  | 61  | 54  | 80  | 69  | 60  | 54  | 66  | 59  | 53  |  | 64  | 57  | 52  |  | 61  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 53  | 46  | 59  | 51  | 46  |  | 57  | 50  | 45  |  | 55  |
| 6   | 70  | 56  | 47  | 40  | 68  | 55  | 46  | 40  | 53  | 46  | 40  |  | 52  | 45  | 40  |  | 50  |
| 7   | 64  | 51  | 42  | 36  | 63  | 50  | 41  | 35  | 48  | 41  | 35  |  | 47  | 40  | 35  |  | 46  |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 37  | 32  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  |
| 9   | 56  | 42  | 34  | 28  | 55  | 42  | 34  | 28  | 41  | 33  | 28  |  | 40  | 33  | 28  |  | 39  |
| 10  | 52  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 30  | 26  |  | 37  | 30  | 25  |  | 36  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5802 | 5802 | 5802 |
| 5°  | 5774 | 5771 | 5858 |
| 10° | 5771 | 5769 | 5856 |
| 15° | 5754 | 5759 | 5860 |
| 20° | 5736 | 5747 | 5850 |
| 25° | 5707 | 5722 | 5832 |
| 30° | 5673 | 5697 | 5821 |
| 35° | 5636 | 5671 | 5818 |
| 40° | 5592 | 5650 | 5808 |
| 45° | 5558 | 5628 | 5784 |
| 50° | 5502 | 5588 | 5746 |
| 55° | 5416 | 5517 | 5690 |
| 60° | 5285 | 5422 | 5589 |
| 65° | 5087 | 5279 | 5335 |
| 70° | 4783 | 5005 | 4974 |
| 75° | 4295 | 4477 | 4507 |
| 80° | 3547 | 3730 | 3926 |
| 85° | 2378 | 2768 | 2919 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5784 cd/sqm

TEST NUMBER: P1585800

CATALOG NUMBER: 14CZSP-SB-54VHE-L850-S

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 163.2  | 3.2       |
| 10°-20°   | 469.1  | 9.2       |
| 20°-30°   | 714.3  | 14.1      |
| 30°-40°   | 869.3  | 17.1      |
| 40°-50°   | 916.4  | 18.0      |
| 50°-60°   | 844.1  | 16.6      |
| 60°-70°   | 651.9  | 12.8      |
| 70°-80°   | 364.8  | 7.2       |
| 80°-90°   | 87.9   | 1.7       |
| 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°    | 1346.5 | 26.5      |
| 0°-40°    | 2215.8 | 43.6      |
| 0°-60°    | 3976.4 | 78.3      |
| 0°-90°    | 5081.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5081.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1722 | 1722  | 1722 | 1722  | 1722 |      |
| 5°  | 1707 | 1731  | 1706 | 1708  | 1732 | 162  |
| 15° | 1649 | 1672  | 1651 | 1660  | 1680 | 466  |
| 25° | 1535 | 1557  | 1539 | 1549  | 1568 | 708  |
| 35° | 1370 | 1390  | 1379 | 1396  | 1414 | 857  |
| 45° | 1166 | 1183  | 1181 | 1199  | 1214 | 899  |
| 55° | 922  | 938   | 939  | 958   | 969  | 823  |
| 65° | 638  | 657   | 662  | 668   | 669  | 630  |
| 75° | 330  | 350   | 344  | 343   | 346  | 350  |
| 85° | 62   | 68    | 72   | 80    | 76   | 79   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1585800

CATALOG NUMBER: 14CZSP-SB-54VHE-L850-S

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1721.8 | 1721.8 | 1721.8 | 1721.8 | 1721.8 |
| 2.5°  | 1710.9 | 1735.8 | 1710.9 | 1714.8 | 1728.8 |
| 5°    | 1707.0 | 1731.1 | 1706.2 | 1708.5 | 1731.9 |
| 7.5°  | 1696.9 | 1721.8 | 1698.4 | 1701.5 | 1724.1 |
| 10°   | 1686.8 | 1709.3 | 1686.0 | 1689.9 | 1711.6 |
| 12.5° | 1669.6 | 1693.0 | 1671.2 | 1675.9 | 1697.6 |
| 15°   | 1649.4 | 1672.0 | 1651.0 | 1660.3 | 1679.8 |
| 17.5° | 1626.1 | 1647.9 | 1627.6 | 1638.5 | 1657.2 |
| 20°   | 1599.6 | 1620.6 | 1602.7 | 1610.5 | 1631.5 |
| 22.5° | 1568.5 | 1590.3 | 1573.2 | 1580.2 | 1602.7 |
| 25°   | 1535.0 | 1556.8 | 1538.9 | 1549.0 | 1568.5 |
| 27.5° | 1498.5 | 1519.5 | 1503.9 | 1516.4 | 1533.5 |
| 30°   | 1458.0 | 1478.2 | 1464.2 | 1479.0 | 1496.1 |
| 32.5° | 1414.4 | 1436.2 | 1422.2 | 1439.3 | 1456.5 |
| 35°   | 1370.1 | 1390.3 | 1378.7 | 1395.8 | 1414.4 |
| 37.5° | 1321.9 | 1341.3 | 1332.8 | 1350.6 | 1367.8 |
| 40°   | 1271.3 | 1293.1 | 1284.5 | 1303.2 | 1320.3 |
| 42.5° | 1219.2 | 1240.2 | 1233.2 | 1252.6 | 1267.4 |
| 45°   | 1166.3 | 1182.6 | 1181.0 | 1198.9 | 1213.7 |
| 47.5° | 1107.9 | 1128.1 | 1125.0 | 1142.9 | 1156.1 |
| 50°   | 1049.6 | 1065.9 | 1065.9 | 1083.0 | 1096.2 |
| 52.5° | 986.5  | 1002.9 | 1002.9 | 1023.1 | 1034.0 |
| 55°   | 922.0  | 937.5  | 939.1  | 958.5  | 968.6  |
| 57.5° | 853.5  | 869.8  | 872.9  | 892.4  | 901.7  |
| 60°   | 784.2  | 799.8  | 804.5  | 823.9  | 829.4  |
| 62.5° | 711.9  | 730.6  | 732.9  | 748.5  | 751.6  |
| 65°   | 638.0  | 656.7  | 662.1  | 668.3  | 669.1  |
| 67.5° | 562.5  | 582.0  | 587.4  | 587.4  | 587.4  |
| 70°   | 485.5  | 503.4  | 508.0  | 504.9  | 504.9  |
| 72.5° | 407.7  | 427.1  | 424.8  | 421.7  | 423.2  |
| 75°   | 329.9  | 350.1  | 343.9  | 343.1  | 346.2  |
| 77.5° | 255.2  | 274.6  | 264.5  | 270.8  | 271.5  |
| 80°   | 182.8  | 197.6  | 192.2  | 201.5  | 202.3  |
| 82.5° | 117.5  | 126.8  | 128.4  | 136.2  | 133.8  |
| 85°   | 61.5   | 67.7   | 71.6   | 80.1   | 75.5   |
| 87.5° | 19.5   | 25.7   | 23.3   | 27.2   | 21.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1585800

CATALOG NUMBER: 14CZSP-SB-54VHE-L850-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 | 18.14            | 19.80 | 18.51 | 20.11 | 20.43 | 18.36          | 20.01 | 18.72 | 20.33 | 20.64 |
|                 | 3H   | 19.96            | 21.46 | 20.34 | 21.79 | 22.15 | 20.16          | 21.66 | 20.54 | 21.98 | 22.34 |
|                 | 4H   | 20.61            | 22.02 | 21.01 | 22.37 | 22.75 | 20.80          | 22.21 | 21.20 | 22.56 | 22.93 |
|                 | 6H   | 21.04            | 22.35 | 21.45 | 22.71 | 23.10 | 21.25          | 22.56 | 21.66 | 22.92 | 23.31 |
|                 | 8H   | 21.15            | 22.40 | 21.57 | 22.79 | 23.19 | 21.38          | 22.63 | 21.81 | 23.02 | 23.42 |
|                 | 12H  | 21.20            | 22.40 | 21.63 | 22.78 | 23.21 | 21.46          | 22.66 | 21.89 | 23.04 | 23.47 |
| 4H              | 2H   | 18.82            | 20.23 | 19.22 | 20.58 | 20.96 | 18.99          | 20.40 | 19.39 | 20.75 | 21.13 |
|                 | 3H   | 20.86            | 22.05 | 21.27 | 22.45 | 22.84 | 21.01          | 22.19 | 21.41 | 22.59 | 22.99 |
|                 | 4H   | 21.64            | 22.72 | 22.07 | 23.13 | 23.56 | 21.76          | 22.84 | 22.19 | 23.25 | 23.68 |
|                 | 6H   | 22.19            | 23.13 | 22.65 | 23.57 | 24.02 | 22.34          | 23.28 | 22.79 | 23.72 | 24.17 |
|                 | 8H   | 22.34            | 23.22 | 22.80 | 23.66 | 24.12 | 22.51          | 23.39 | 22.97 | 23.83 | 24.30 |
|                 | 12H  | 22.42            | 23.21 | 22.90 | 23.69 | 24.15 | 22.63          | 23.42 | 23.11 | 23.89 | 24.36 |
| 8H              | 4H   | 21.95            | 22.83 | 22.41 | 23.27 | 23.73 | 22.06          | 22.94 | 22.52 | 23.38 | 23.84 |
|                 | 6H   | 22.61            | 23.34 | 23.10 | 23.83 | 24.30 | 22.74          | 23.47 | 23.23 | 23.96 | 24.43 |
|                 | 8H   | 22.82            | 23.47 | 23.32 | 23.97 | 24.46 | 22.98          | 23.63 | 23.49 | 24.14 | 24.62 |
|                 | 12H  | 22.95            | 23.53 | 23.46 | 24.02 | 24.58 | 23.16          | 23.73 | 23.66 | 24.22 | 24.78 |
| 12H             | 4H   | 21.98            | 22.77 | 22.46 | 23.24 | 23.71 | 22.09          | 22.88 | 22.57 | 23.35 | 23.82 |
|                 | 6H   | 22.66            | 23.31 | 23.16 | 23.82 | 24.30 | 22.78          | 23.44 | 23.29 | 23.94 | 24.43 |
|                 | 8H   | 22.91            | 23.49 | 23.42 | 23.98 | 24.54 | 23.07          | 23.65 | 23.58 | 24.14 | 24.70 |