

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: P1584395

Luminaire Tested: 14CZSP-54VHE-L835

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1584395  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-776-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 14CZSP-54VHE-L835  
Description: 1x4 CZSP LED Luminaire, 3500K CCT and 5200 lumens, 80CRI, Ribbed Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

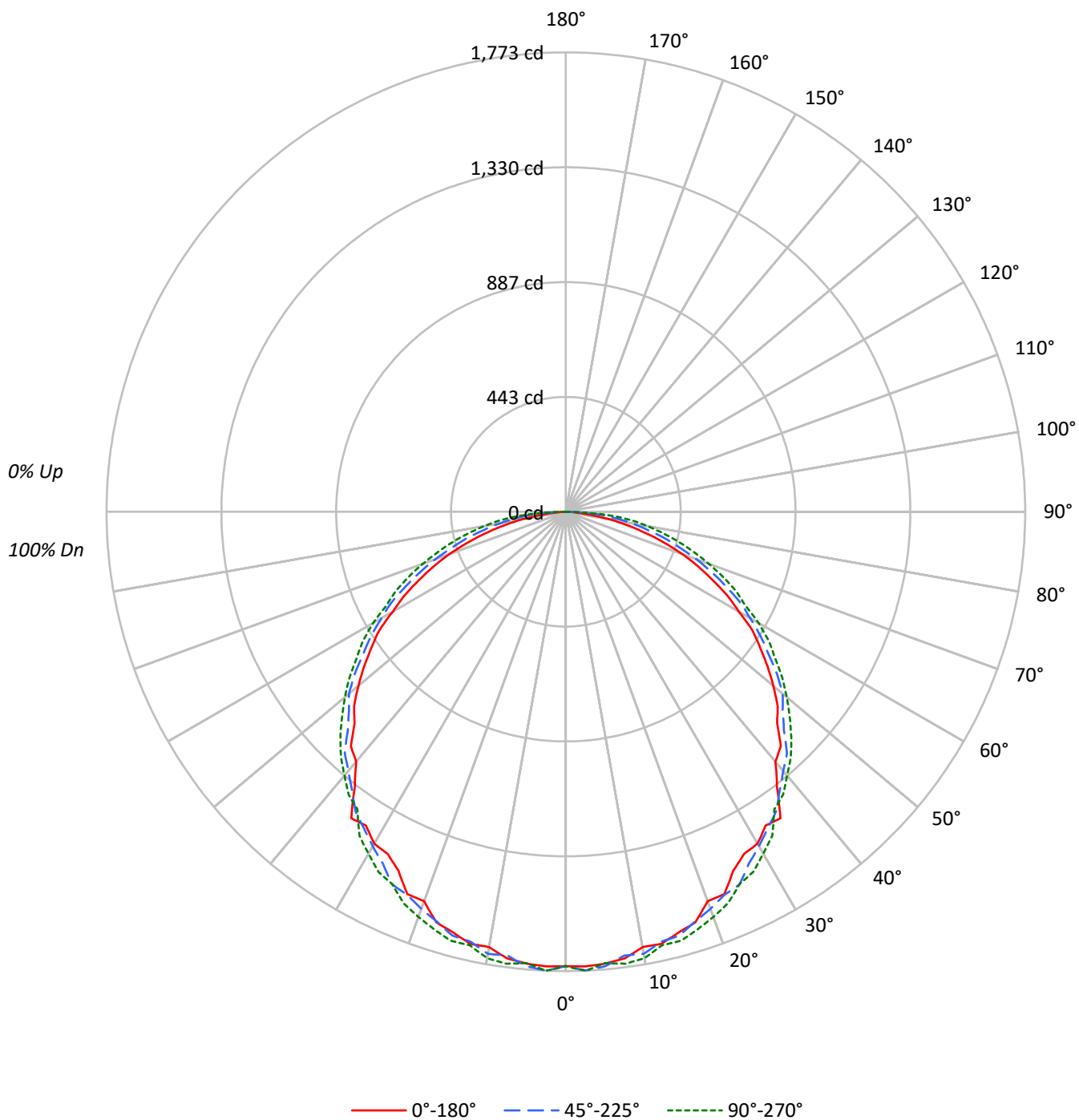
Lumens per Lamp: N/A  
Luminaire Lumens: 5257.0 lumens  
Efficiency: N/A  
Efficacy: 140.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

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

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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  | 105 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 87  |  | 89  |
| 2   | 98  | 89  | 82  | 76  | 95  | 88  | 81  | 75  | 84  | 78  | 74  |  | 81  | 76  | 72  |  | 78  |
| 3   | 89  | 78  | 70  | 63  | 87  | 77  | 69  | 63  | 74  | 67  | 61  |  | 71  | 65  | 60  |  | 68  |
| 4   | 82  | 69  | 60  | 53  | 79  | 68  | 59  | 53  | 65  | 58  | 52  |  | 63  | 57  | 51  |  | 61  |
| 5   | 75  | 62  | 52  | 46  | 73  | 61  | 52  | 45  | 58  | 51  | 45  |  | 56  | 50  | 44  |  | 55  |
| 6   | 69  | 55  | 46  | 40  | 67  | 54  | 46  | 40  | 53  | 45  | 39  |  | 51  | 44  | 39  |  | 49  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 35  |  | 46  | 39  | 34  |  | 45  |
| 8   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  |  | 42  | 36  | 31  |  | 41  |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  |  | 39  | 32  | 28  |  | 38  |
| 10  | 52  | 39  | 31  | 25  | 51  | 38  | 30  | 25  | 37  | 30  | 25  |  | 36  | 30  | 25  |  | 35  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5910 | 5910 | 5910 |
| 5°  | 5920 | 5953 | 5914 |
| 10° | 5837 | 5926 | 5985 |
| 15° | 5863 | 5907 | 5980 |
| 20° | 5735 | 5848 | 5968 |
| 25° | 5684 | 5899 | 5896 |
| 30° | 5755 | 5801 | 5927 |
| 35° | 5939 | 5817 | 5768 |
| 40° | 5537 | 5743 | 5846 |
| 45° | 5494 | 5671 | 5865 |
| 50° | 5480 | 5727 | 5836 |
| 55° | 5382 | 5600 | 5791 |
| 60° | 5200 | 5535 | 5791 |
| 65° | 5000 | 5439 | 5778 |
| 70° | 4727 | 5288 | 5786 |
| 75° | 4177 | 5165 | 5894 |
| 80° | 3437 | 5032 | 6242 |
| 85° | 1921 | 5308 | 6951 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 6951 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 166.2  | 3.2       |
| 10°-20°   | 477.1  | 9.1       |
| 20°-30°   | 725.1  | 13.8      |
| 30°-40°   | 881.8  | 16.8      |
| 40°-50°   | 925.6  | 17.6      |
| 50°-60°   | 856.1  | 16.3      |
| 60°-70°   | 674.4  | 12.8      |
| 70°-80°   | 414.5  | 7.9       |
| 80°-90°   | 136.1  | 2.6       |
| 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°    | 1368.5 | 26.0      |
| 0°-40°    | 2250.3 | 42.8      |
| 0°-60°    | 4031.9 | 76.7      |
| 0°-90°    | 5257.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5257.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1754 | 1754  | 1754 | 1754  | 1754 |      |
| 5°  | 1750 | 1720  | 1760 | 1745  | 1748 | 166  |
| 15° | 1681 | 1676  | 1693 | 1716  | 1714 | 474  |
| 25° | 1529 | 1557  | 1587 | 1582  | 1586 | 710  |
| 35° | 1444 | 1392  | 1414 | 1436  | 1402 | 875  |
| 45° | 1153 | 1177  | 1190 | 1224  | 1231 | 896  |
| 55° | 916  | 945   | 953  | 978   | 986  | 819  |
| 65° | 627  | 652   | 682  | 712   | 725  | 621  |
| 75° | 321  | 356   | 397  | 437   | 453  | 341  |
| 85° | 50   | 87    | 137  | 168   | 180  | 70   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1753.8 | 1753.8 | 1753.8 | 1753.8 | 1753.8 |
| 2.5°  | 1756.5 | 1759.2 | 1771.9 | 1743.9 | 1772.8 |
| 5°    | 1750.2 | 1719.5 | 1760.1 | 1744.8 | 1748.4 |
| 7.5°  | 1738.5 | 1742.1 | 1727.6 | 1736.7 | 1759.2 |
| 10°   | 1705.9 | 1728.5 | 1732.1 | 1735.8 | 1749.3 |
| 12.5° | 1707.7 | 1693.3 | 1699.6 | 1725.8 | 1714.1 |
| 15°   | 1680.6 | 1676.1 | 1693.3 | 1715.9 | 1714.1 |
| 17.5° | 1661.7 | 1651.7 | 1658.0 | 1668.9 | 1689.7 |
| 20°   | 1599.3 | 1625.5 | 1630.9 | 1664.4 | 1664.4 |
| 22.5° | 1597.5 | 1596.6 | 1600.2 | 1617.4 | 1635.5 |
| 25°   | 1528.8 | 1556.8 | 1586.7 | 1582.1 | 1585.8 |
| 27.5° | 1489.1 | 1520.7 | 1530.6 | 1561.4 | 1566.8 |
| 30°   | 1479.1 | 1484.6 | 1490.9 | 1524.3 | 1523.4 |
| 32.5° | 1435.8 | 1444.8 | 1449.3 | 1468.3 | 1482.8 |
| 35°   | 1443.9 | 1392.4 | 1414.1 | 1435.8 | 1402.3 |
| 37.5° | 1338.2 | 1346.3 | 1355.4 | 1371.6 | 1377.0 |
| 40°   | 1258.7 | 1279.5 | 1305.7 | 1324.6 | 1329.1 |
| 42.5° | 1227.9 | 1258.7 | 1263.2 | 1280.4 | 1284.9 |
| 45°   | 1153.0 | 1177.3 | 1190.0 | 1224.3 | 1230.7 |
| 47.5° | 1108.7 | 1112.3 | 1134.9 | 1167.4 | 1171.9 |
| 50°   | 1045.4 | 1069.8 | 1092.4 | 1106.9 | 1113.2 |
| 52.5° | 981.3  | 1008.4 | 1026.5 | 1040.0 | 1052.7 |
| 55°   | 916.2  | 945.1  | 953.3  | 977.7  | 985.8  |
| 57.5° | 855.7  | 864.7  | 890.9  | 914.4  | 928.9  |
| 60°   | 771.6  | 802.4  | 821.3  | 864.7  | 859.3  |
| 62.5° | 703.9  | 724.7  | 759.9  | 781.6  | 778.9  |
| 65°   | 627.1  | 651.5  | 682.2  | 712.0  | 724.7  |
| 67.5° | 553.9  | 586.4  | 609.0  | 647.9  | 656.9  |
| 70°   | 479.8  | 495.2  | 536.7  | 574.7  | 587.3  |
| 72.5° | 400.3  | 424.7  | 460.8  | 502.4  | 517.7  |
| 75°   | 320.8  | 356.0  | 396.7  | 437.3  | 452.7  |
| 77.5° | 245.8  | 276.5  | 322.6  | 369.6  | 384.9  |
| 80°   | 177.1  | 205.1  | 259.3  | 302.7  | 321.7  |
| 82.5° | 103.9  | 141.9  | 195.2  | 243.1  | 257.5  |
| 85°   | 49.7   | 86.7   | 137.3  | 168.1  | 179.8  |
| 87.5° | 13.6   | 38.9   | 60.5   | 78.6   | 81.3   |
| 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 | 17.98            | 19.65 | 18.34 | 19.96 | 20.28 | 18.41          | 20.08 | 18.77 | 20.39 | 20.71 |
|                 | 3H   | 19.79            | 21.30 | 20.16 | 21.63 | 21.99 | 20.49          | 22.01 | 20.87 | 22.33 | 22.69 |
|                 | 4H   | 20.42            | 21.85 | 20.82 | 22.20 | 22.57 | 21.37          | 22.80 | 21.77 | 23.15 | 23.53 |
|                 | 6H   | 20.84            | 22.17 | 21.25 | 22.53 | 22.92 | 22.16          | 23.49 | 22.57 | 23.85 | 24.24 |
|                 | 8H   | 20.94            | 22.21 | 21.36 | 22.59 | 22.99 | 22.50          | 23.77 | 22.92 | 24.16 | 24.56 |
|                 | 12H  | 20.98            | 22.19 | 21.40 | 22.58 | 23.00 | 22.78          | 24.00 | 23.21 | 24.38 | 24.81 |
| 4H              | 2H   | 18.71            | 20.14 | 19.11 | 20.49 | 20.86 | 19.04          | 20.47 | 19.44 | 20.82 | 21.20 |
|                 | 3H   | 20.74            | 21.94 | 21.14 | 22.34 | 22.74 | 21.36          | 22.56 | 21.77 | 22.96 | 23.36 |
|                 | 4H   | 21.51            | 22.61 | 21.94 | 23.02 | 23.45 | 22.40          | 23.49 | 22.83 | 23.90 | 24.34 |
|                 | 6H   | 22.05            | 23.01 | 22.50 | 23.45 | 23.90 | 23.35          | 24.31 | 23.80 | 24.75 | 25.20 |
|                 | 8H   | 22.19            | 23.09 | 22.65 | 23.53 | 24.00 | 23.77          | 24.67 | 24.23 | 25.11 | 25.57 |
|                 | 12H  | 22.26            | 23.08 | 22.74 | 23.55 | 24.02 | 24.13          | 24.95 | 24.61 | 25.42 | 25.89 |
| 8H              | 4H   | 21.95            | 22.84 | 22.40 | 23.29 | 23.75 | 22.72          | 23.62 | 23.18 | 24.06 | 24.52 |
|                 | 6H   | 22.62            | 23.38 | 23.12 | 23.86 | 24.34 | 23.83          | 24.59 | 24.33 | 25.07 | 25.55 |
|                 | 8H   | 22.84            | 23.51 | 23.34 | 24.02 | 24.50 | 24.37          | 25.05 | 24.88 | 25.55 | 26.04 |
|                 | 12H  | 22.97            | 23.57 | 23.48 | 24.06 | 24.62 | 24.88          | 25.47 | 25.38 | 25.96 | 26.52 |
| 12H             | 4H   | 22.03            | 22.84 | 22.51 | 23.31 | 23.78 | 22.75          | 23.56 | 23.23 | 24.03 | 24.50 |
|                 | 6H   | 22.75            | 23.43 | 23.26 | 23.94 | 24.42 | 23.90          | 24.57 | 24.40 | 25.08 | 25.56 |
|                 | 8H   | 23.04            | 23.64 | 23.55 | 24.13 | 24.69 | 24.51          | 25.11 | 25.02 | 25.60 | 26.16 |