

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: P1584407

Luminaire Tested: 14CZSP-54VHE-L940

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1584407  
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-L940  
Description: 1x4 CZSP LED Luminaire, 4000K CCT and 5200 lumens, 90CRI, Ribbed Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

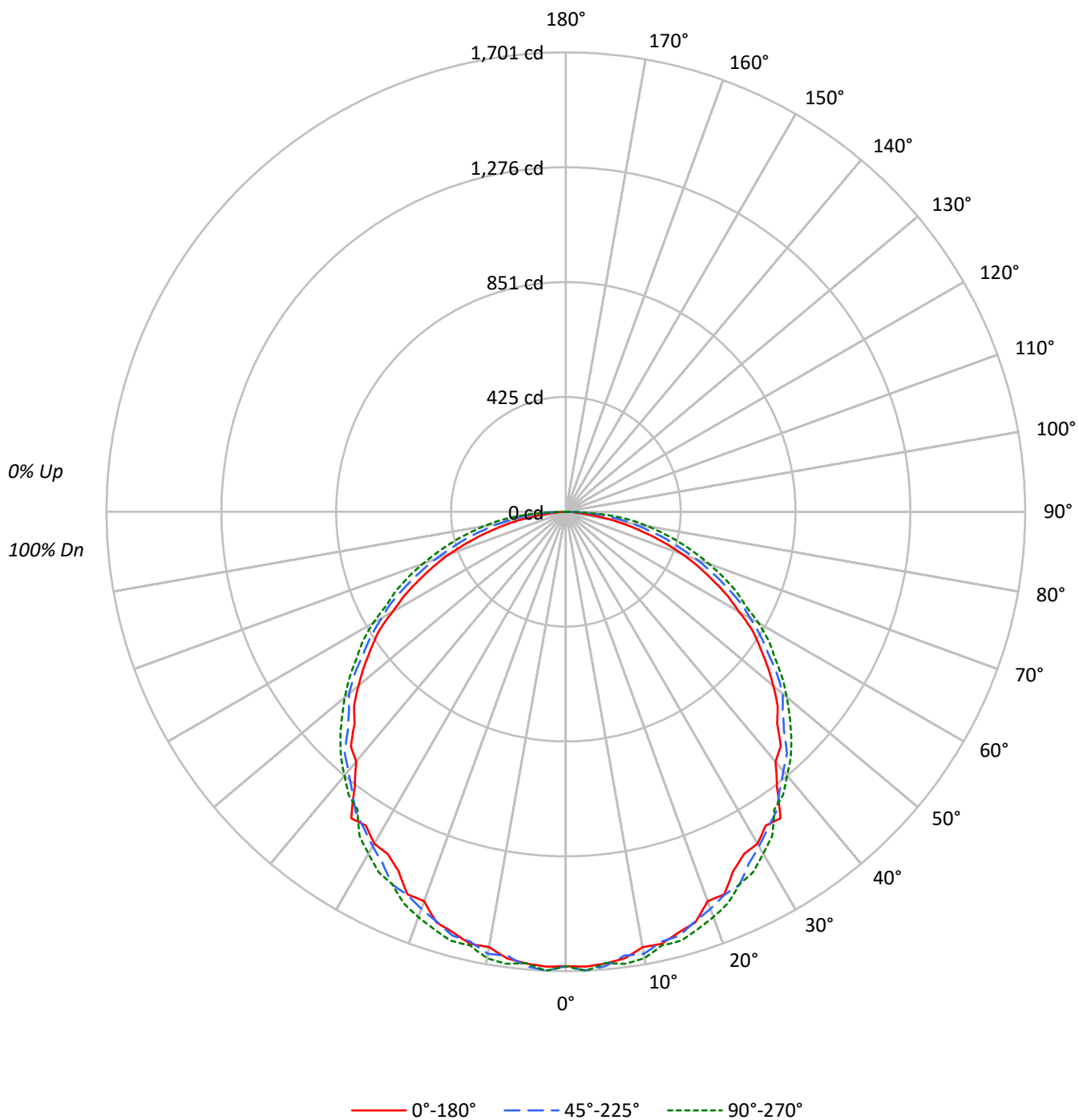
Lumens per Lamp: N/A  
Luminaire Lumens: 5044.0 lumens  
Efficiency: N/A  
Efficacy: 134.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

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°  | 5670 | 5670 | 5670 |
| 5°  | 5680 | 5712 | 5674 |
| 10° | 5600 | 5687 | 5743 |
| 15° | 5625 | 5668 | 5737 |
| 20° | 5502 | 5611 | 5726 |
| 25° | 5454 | 5660 | 5657 |
| 30° | 5522 | 5566 | 5687 |
| 35° | 5699 | 5581 | 5535 |
| 40° | 5312 | 5511 | 5610 |
| 45° | 5271 | 5441 | 5627 |
| 50° | 5258 | 5495 | 5599 |
| 55° | 5164 | 5373 | 5557 |
| 60° | 4990 | 5311 | 5556 |
| 65° | 4797 | 5219 | 5544 |
| 70° | 4536 | 5074 | 5552 |
| 75° | 4007 | 4955 | 5654 |
| 80° | 3297 | 4828 | 5988 |
| 85° | 1844 | 5096 | 6669 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 6669 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 159.5  | 3.2       |
| 10°-20°   | 457.8  | 9.1       |
| 20°-30°   | 695.7  | 13.8      |
| 30°-40°   | 846.1  | 16.8      |
| 40°-50°   | 888.1  | 17.6      |
| 50°-60°   | 821.4  | 16.3      |
| 60°-70°   | 647.1  | 12.8      |
| 70°-80°   | 397.7  | 7.9       |
| 80°-90°   | 130.6  | 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°    | 1313.0 | 26.0      |
| 0°-40°    | 2159.1 | 42.8      |
| 0°-60°    | 3868.6 | 76.7      |
| 0°-90°    | 5044.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5044.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1683 | 1683  | 1683 | 1683  | 1683 |      |
| 5°  | 1679 | 1650  | 1689 | 1674  | 1678 | 159  |
| 15° | 1612 | 1608  | 1625 | 1646  | 1645 | 454  |
| 25° | 1467 | 1494  | 1522 | 1518  | 1522 | 681  |
| 35° | 1385 | 1336  | 1357 | 1378  | 1346 | 839  |
| 45° | 1106 | 1130  | 1142 | 1175  | 1181 | 860  |
| 55° | 879  | 907   | 915  | 938   | 946  | 786  |
| 65° | 602  | 625   | 655  | 683   | 695  | 596  |
| 75° | 308  | 342   | 381  | 420   | 434  | 328  |
| 85° | 48   | 83    | 132  | 161   | 172  | 67   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1682.8 | 1682.8 | 1682.8 | 1682.8 | 1682.8 |
| 2.5°  | 1685.4 | 1688.0 | 1700.1 | 1673.2 | 1701.0 |
| 5°    | 1679.3 | 1649.8 | 1688.8 | 1674.1 | 1677.6 |
| 7.5°  | 1668.0 | 1671.5 | 1657.6 | 1666.3 | 1688.0 |
| 10°   | 1636.8 | 1658.5 | 1662.0 | 1665.4 | 1678.4 |
| 12.5° | 1638.5 | 1624.7 | 1630.7 | 1655.9 | 1644.6 |
| 15°   | 1612.5 | 1608.2 | 1624.7 | 1646.4 | 1644.6 |
| 17.5° | 1594.3 | 1584.8 | 1590.9 | 1601.3 | 1621.2 |
| 20°   | 1534.5 | 1559.7 | 1564.9 | 1596.9 | 1596.9 |
| 22.5° | 1532.8 | 1531.9 | 1535.4 | 1551.9 | 1569.2 |
| 25°   | 1466.9 | 1493.8 | 1522.4 | 1518.0 | 1521.5 |
| 27.5° | 1428.7 | 1459.1 | 1468.6 | 1498.1 | 1503.3 |
| 30°   | 1419.2 | 1424.4 | 1430.5 | 1462.6 | 1461.7 |
| 32.5° | 1377.6 | 1386.3 | 1390.6 | 1408.8 | 1422.7 |
| 35°   | 1385.4 | 1336.0 | 1356.8 | 1377.6 | 1345.5 |
| 37.5° | 1284.0 | 1291.8 | 1300.4 | 1316.0 | 1321.2 |
| 40°   | 1207.7 | 1227.6 | 1252.8 | 1271.0 | 1275.3 |
| 42.5° | 1178.2 | 1207.7 | 1212.0 | 1228.5 | 1232.8 |
| 45°   | 1106.2 | 1129.6 | 1141.8 | 1174.7 | 1180.8 |
| 47.5° | 1063.8 | 1067.2 | 1088.9 | 1120.1 | 1124.4 |
| 50°   | 1003.1 | 1026.5 | 1048.2 | 1062.0 | 1068.1 |
| 52.5° | 941.5  | 967.5  | 984.9  | 997.9  | 1010.0 |
| 55°   | 879.1  | 906.8  | 914.6  | 938.0  | 945.9  |
| 57.5° | 821.0  | 829.7  | 854.8  | 877.4  | 891.2  |
| 60°   | 740.4  | 769.9  | 788.1  | 829.7  | 824.5  |
| 62.5° | 675.4  | 695.3  | 729.1  | 749.9  | 747.3  |
| 65°   | 601.7  | 625.1  | 654.6  | 683.2  | 695.3  |
| 67.5° | 531.4  | 562.7  | 584.3  | 621.6  | 630.3  |
| 70°   | 460.4  | 475.1  | 515.0  | 551.4  | 563.5  |
| 72.5° | 384.1  | 407.5  | 442.1  | 482.0  | 496.8  |
| 75°   | 307.8  | 341.6  | 380.6  | 419.6  | 434.3  |
| 77.5° | 235.8  | 265.3  | 309.5  | 354.6  | 369.3  |
| 80°   | 169.9  | 196.8  | 248.8  | 290.4  | 308.6  |
| 82.5° | 99.7   | 136.1  | 187.3  | 233.2  | 247.1  |
| 85°   | 47.7   | 83.2   | 131.8  | 161.3  | 172.5  |
| 87.5° | 13.0   | 37.3   | 58.1   | 75.4   | 78.0   |
| 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 | 17.83            | 19.50 | 18.20 | 19.82 | 20.13 | 18.27          | 19.94 | 18.63 | 20.25 | 20.56 |
|                 | 3H   | 19.64            | 21.16 | 20.02 | 21.48 | 21.84 | 20.35          | 21.87 | 20.73 | 22.19 | 22.55 |
|                 | 4H   | 20.28            | 21.71 | 20.68 | 22.06 | 22.43 | 21.23          | 22.66 | 21.63 | 23.01 | 23.38 |
|                 | 6H   | 20.69            | 22.02 | 21.10 | 22.39 | 22.78 | 22.02          | 23.34 | 22.43 | 23.71 | 24.10 |
|                 | 8H   | 20.79            | 22.06 | 21.22 | 22.45 | 22.85 | 22.35          | 23.62 | 22.78 | 24.01 | 24.41 |
|                 | 12H  | 20.83            | 22.05 | 21.26 | 22.43 | 22.86 | 22.64          | 23.86 | 23.07 | 24.24 | 24.67 |
| 4H              | 2H   | 18.57            | 20.00 | 18.96 | 20.34 | 20.72 | 18.90          | 20.33 | 19.30 | 20.68 | 21.05 |
|                 | 3H   | 20.59            | 21.80 | 21.00 | 22.19 | 22.59 | 21.21          | 22.42 | 21.62 | 22.82 | 23.22 |
|                 | 4H   | 21.37            | 22.46 | 21.80 | 22.88 | 23.31 | 22.25          | 23.35 | 22.68 | 23.76 | 24.19 |
|                 | 6H   | 21.91            | 22.87 | 22.36 | 23.31 | 23.76 | 23.21          | 24.16 | 23.66 | 24.60 | 25.06 |
|                 | 8H   | 22.05            | 22.95 | 22.51 | 23.39 | 23.85 | 23.62          | 24.52 | 24.08 | 24.96 | 25.43 |
|                 | 12H  | 22.12            | 22.93 | 22.60 | 23.41 | 23.87 | 23.99          | 24.80 | 24.47 | 25.28 | 25.74 |
| 8H              | 4H   | 21.80            | 22.70 | 22.26 | 23.14 | 23.61 | 22.58          | 23.47 | 23.03 | 23.92 | 24.38 |
|                 | 6H   | 22.48            | 23.23 | 22.97 | 23.72 | 24.19 | 23.69          | 24.44 | 24.18 | 24.93 | 25.40 |
|                 | 8H   | 22.69            | 23.37 | 23.20 | 23.87 | 24.36 | 24.23          | 24.91 | 24.74 | 25.41 | 25.89 |
|                 | 12H  | 22.83            | 23.43 | 23.34 | 23.92 | 24.48 | 24.73          | 25.33 | 25.24 | 25.82 | 26.38 |
| 12H             | 4H   | 21.88            | 22.70 | 22.36 | 23.17 | 23.64 | 22.61          | 23.42 | 23.09 | 23.89 | 24.36 |
|                 | 6H   | 22.61            | 23.29 | 23.12 | 23.79 | 24.28 | 23.75          | 24.43 | 24.26 | 24.93 | 25.42 |
|                 | 8H   | 22.90            | 23.50 | 23.40 | 23.99 | 24.54 | 24.37          | 24.96 | 24.87 | 25.45 | 26.01 |