

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: P1586510

Luminaire Tested: 22CZSP-54HE-L950-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586510  
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: 22CZSP-54HE-L950-S  
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 5000 lumens, 90CRI, Smooth Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

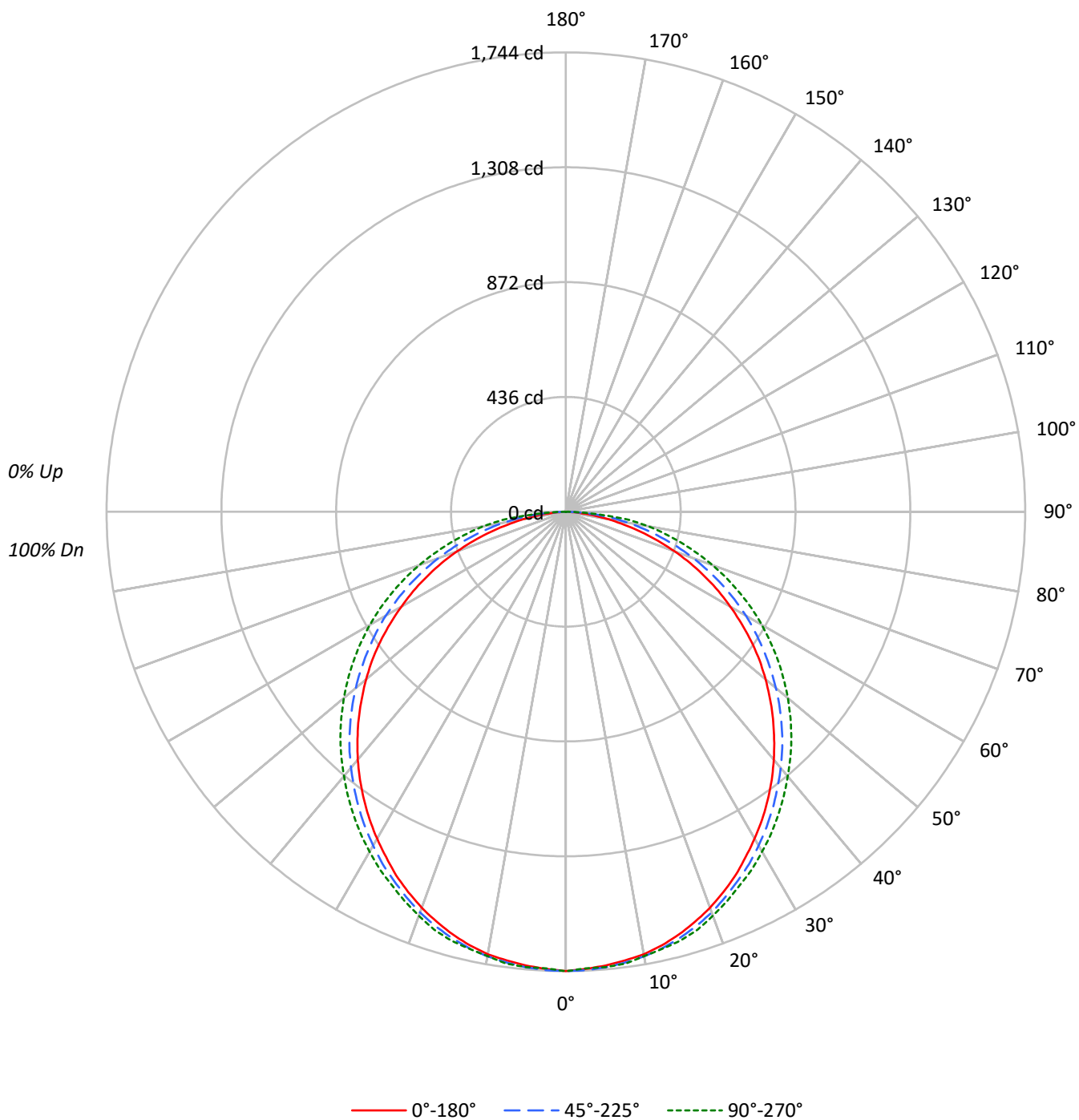
Lumens per Lamp: N/A  
Luminaire Lumens: 5091.0 lumens  
Efficiency: N/A  
Efficacy: 141.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 36.1  
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  |     |     | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 | 100 |
| 1   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 88  |  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  | 74  | 71  | 69  |
| 3   | 89  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 61  |  | 69  | 64  | 60  | 57  |
| 4   | 82  | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 52  |  | 63  | 57  | 52  |  | 61  | 56  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  |  | 57  | 50  | 45  |  | 55  | 49  | 44  | 42  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  |  | 51  | 44  | 39  |  | 50  | 44  | 39  | 37  |
| 7   | 64  | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  |  | 47  | 40  | 35  |  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  |  | 37  | 30  | 25  |  | 36  | 30  | 25  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5460 | 5460 | 5460 |
| 5°  | 5436 | 5457 | 5453 |
| 10° | 5424 | 5449 | 5445 |
| 15° | 5385 | 5428 | 5461 |
| 20° | 5331 | 5394 | 5439 |
| 25° | 5264 | 5338 | 5403 |
| 30° | 5182 | 5291 | 5388 |
| 35° | 5107 | 5240 | 5372 |
| 40° | 5023 | 5187 | 5356 |
| 45° | 4927 | 5135 | 5362 |
| 50° | 4822 | 5072 | 5360 |
| 55° | 4696 | 5001 | 5367 |
| 60° | 4520 | 4946 | 5380 |
| 65° | 4312 | 4850 | 5397 |
| 70° | 4019 | 4715 | 5421 |
| 75° | 3581 | 4527 | 5473 |
| 80° | 2961 | 4312 | 5742 |
| 85° | 1926 | 3895 | 5016 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5923 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 164.9  | 3.2       |
| 10°-20°   | 472.2  | 9.3       |
| 20°-30°   | 712.2  | 14.0      |
| 30°-40°   | 857.8  | 16.8      |
| 40°-50°   | 895.9  | 17.6      |
| 50°-60°   | 822.8  | 16.2      |
| 60°-70°   | 648.0  | 12.7      |
| 70°-80°   | 397.6  | 7.8       |
| 80°-90°   | 119.6  | 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°    | 1349.3 | 26.5      |
| 0°-40°    | 2207.2 | 43.4      |
| 0°-60°    | 3925.8 | 77.1      |
| 0°-90°    | 5091.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5091.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1744 | 1744  | 1744 | 1744  | 1744 |      |
| 5°  | 1729 | 1732  | 1736 | 1742  | 1735 | 164  |
| 15° | 1661 | 1664  | 1674 | 1685  | 1685 | 468  |
| 25° | 1524 | 1527  | 1545 | 1564  | 1564 | 701  |
| 35° | 1336 | 1343  | 1371 | 1399  | 1405 | 836  |
| 45° | 1113 | 1125  | 1160 | 1200  | 1211 | 858  |
| 55° | 860  | 876   | 916  | 967   | 983  | 768  |
| 65° | 582  | 602   | 655  | 709   | 728  | 576  |
| 75° | 296  | 320   | 374  | 433   | 452  | 314  |
| 85° | 54   | 74    | 108  | 137   | 140  | 70   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1743.8 | 1743.8 | 1743.8 | 1743.8 | 1743.8 |
| 2.5°  | 1737.1 | 1740.5 | 1741.6 | 1742.7 | 1734.9 |
| 5°    | 1729.3 | 1731.5 | 1736.0 | 1741.6 | 1734.9 |
| 7.5°  | 1718.1 | 1720.3 | 1725.9 | 1733.7 | 1730.4 |
| 10°   | 1705.8 | 1706.9 | 1713.6 | 1719.2 | 1712.5 |
| 12.5° | 1685.7 | 1689.1 | 1696.9 | 1701.4 | 1699.1 |
| 15°   | 1661.1 | 1664.5 | 1674.5 | 1684.6 | 1684.6 |
| 17.5° | 1632.1 | 1636.6 | 1648.8 | 1662.3 | 1663.4 |
| 20°   | 1599.7 | 1603.0 | 1618.7 | 1632.1 | 1632.1 |
| 22.5° | 1562.8 | 1567.3 | 1582.9 | 1597.5 | 1599.7 |
| 25°   | 1523.7 | 1527.1 | 1545.0 | 1563.9 | 1563.9 |
| 27.5° | 1477.9 | 1484.6 | 1507.0 | 1526.0 | 1530.4 |
| 30°   | 1433.2 | 1438.8 | 1463.4 | 1486.9 | 1490.2 |
| 32.5° | 1386.3 | 1393.0 | 1418.7 | 1444.4 | 1450.0 |
| 35°   | 1336.1 | 1342.8 | 1370.7 | 1398.6 | 1405.3 |
| 37.5° | 1283.6 | 1291.4 | 1320.4 | 1352.8 | 1359.5 |
| 40°   | 1228.8 | 1237.8 | 1269.0 | 1303.7 | 1310.4 |
| 42.5° | 1170.7 | 1183.0 | 1216.5 | 1252.3 | 1262.3 |
| 45°   | 1112.6 | 1124.9 | 1159.6 | 1199.8 | 1210.9 |
| 47.5° | 1051.2 | 1065.7 | 1101.5 | 1143.9 | 1156.2 |
| 50°   | 989.8  | 1004.3 | 1041.1 | 1086.9 | 1100.3 |
| 52.5° | 927.2  | 941.7  | 979.7  | 1027.7 | 1042.3 |
| 55°   | 860.2  | 875.8  | 916.0  | 967.4  | 983.1  |
| 57.5° | 790.9  | 811.0  | 853.5  | 906.0  | 921.6  |
| 60°   | 721.7  | 741.8  | 789.8  | 841.2  | 859.1  |
| 62.5° | 653.5  | 672.5  | 721.7  | 776.4  | 795.4  |
| 65°   | 582.0  | 602.1  | 654.6  | 709.4  | 728.4  |
| 67.5° | 511.6  | 531.7  | 584.2  | 641.2  | 661.3  |
| 70°   | 439.0  | 461.4  | 515.0  | 572.0  | 592.1  |
| 72.5° | 366.4  | 389.9  | 444.6  | 502.7  | 521.7  |
| 75°   | 296.0  | 319.5  | 374.2  | 433.4  | 452.4  |
| 77.5° | 226.8  | 252.5  | 306.1  | 366.4  | 384.3  |
| 80°   | 164.2  | 188.8  | 239.1  | 298.3  | 318.4  |
| 82.5° | 105.0  | 126.2  | 176.5  | 232.4  | 246.9  |
| 85°   | 53.6   | 73.7   | 108.4  | 137.4  | 139.6  |
| 87.5° | 16.8   | 23.5   | 35.7   | 53.6   | 54.7   |
| 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 | 17.38            | 19.04 | 17.74 | 19.35 | 19.67 | 18.21          | 19.87 | 18.57 | 20.18 | 20.50 |
|                 | 3H   | 19.13            | 20.64 | 19.51 | 20.96 | 21.32 | 20.32          | 21.83 | 20.70 | 22.16 | 22.52 |
|                 | 4H   | 19.75            | 21.17 | 20.15 | 21.52 | 21.89 | 21.21          | 22.63 | 21.61 | 22.98 | 23.36 |
|                 | 6H   | 20.16            | 21.48 | 20.57 | 21.84 | 22.24 | 21.99          | 23.31 | 22.40 | 23.68 | 24.07 |
|                 | 8H   | 20.27            | 21.53 | 20.69 | 21.92 | 22.32 | 22.31          | 23.58 | 22.74 | 23.96 | 24.36 |
|                 | 12H  | 20.32            | 21.53 | 20.75 | 21.91 | 22.34 | 22.52          | 23.73 | 22.95 | 24.12 | 24.54 |
| 4H              | 2H   | 18.15            | 19.57 | 18.55 | 19.92 | 20.29 | 18.79          | 20.22 | 19.19 | 20.56 | 20.94 |
|                 | 3H   | 20.12            | 21.32 | 20.53 | 21.72 | 22.12 | 21.15          | 22.35 | 21.56 | 22.74 | 23.14 |
|                 | 4H   | 20.86            | 21.95 | 21.29 | 22.36 | 22.80 | 22.20          | 23.29 | 22.63 | 23.70 | 24.13 |
|                 | 6H   | 21.39            | 22.34 | 21.84 | 22.78 | 23.24 | 23.15          | 24.11 | 23.61 | 24.55 | 25.00 |
|                 | 8H   | 21.54            | 22.43 | 22.00 | 22.87 | 23.33 | 23.55          | 24.44 | 24.01 | 24.88 | 25.35 |
|                 | 12H  | 21.62            | 22.42 | 22.10 | 22.90 | 23.37 | 23.83          | 24.63 | 24.31 | 25.11 | 25.57 |
| 8H              | 4H   | 21.32            | 22.21 | 21.78 | 22.65 | 23.12 | 22.49          | 23.38 | 22.95 | 23.82 | 24.29 |
|                 | 6H   | 21.98            | 22.73 | 22.47 | 23.21 | 23.69 | 23.60          | 24.35 | 24.09 | 24.83 | 25.31 |
|                 | 8H   | 22.19            | 22.86 | 22.70 | 23.37 | 23.85 | 24.11          | 24.78 | 24.62 | 25.29 | 25.77 |
|                 | 12H  | 22.33            | 22.92 | 22.84 | 23.41 | 23.97 | 24.50          | 25.09 | 25.00 | 25.58 | 26.14 |
| 12H             | 4H   | 21.41            | 22.21 | 21.89 | 22.69 | 23.16 | 22.51          | 23.32 | 22.99 | 23.79 | 24.26 |
|                 | 6H   | 22.11            | 22.78 | 22.62 | 23.29 | 23.77 | 23.65          | 24.32 | 24.16 | 24.82 | 25.31 |
|                 | 8H   | 22.39            | 22.98 | 22.90 | 23.47 | 24.03 | 24.23          | 24.82 | 24.73 | 25.31 | 25.87 |