

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: P1586716

Luminaire Tested: 22CZSP-A-52-L840-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586716  
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-A-52-L840-S  
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 80CRI, Smooth Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

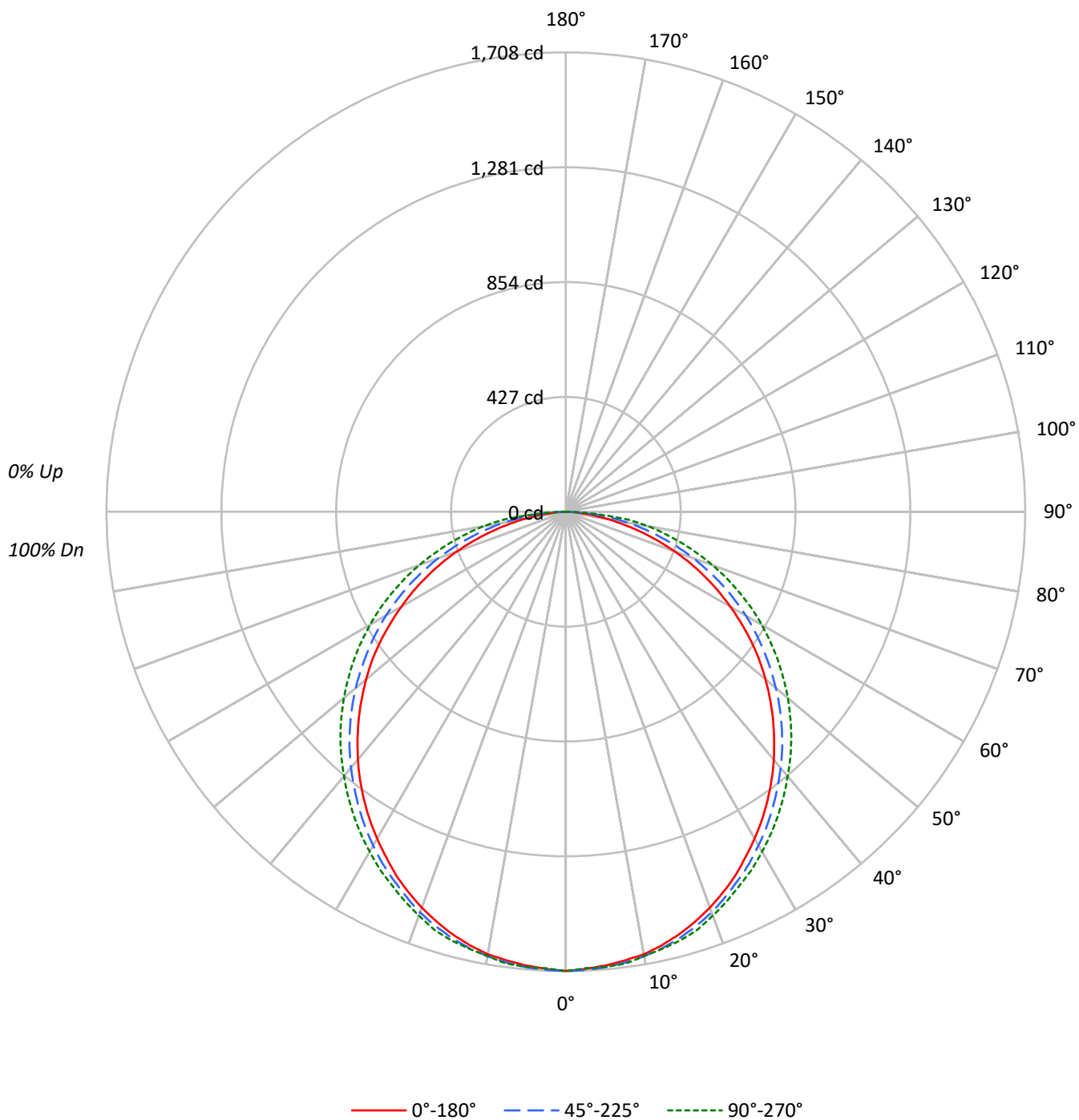
Lumens per Lamp: N/A  
Luminaire Lumens: 4985.0 lumens  
Efficiency: N/A  
Efficacy: 134.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 37.2  
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  | 30  | 10  | 50  | 30 | 10 |
| 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°  | 5347 | 5347 | 5347 |
| 5°  | 5323 | 5343 | 5340 |
| 10° | 5311 | 5335 | 5332 |
| 15° | 5273 | 5316 | 5347 |
| 20° | 5220 | 5282 | 5325 |
| 25° | 5155 | 5227 | 5291 |
| 30° | 5074 | 5181 | 5276 |
| 35° | 5001 | 5131 | 5260 |
| 40° | 4918 | 5079 | 5245 |
| 45° | 4825 | 5028 | 5251 |
| 50° | 4721 | 4966 | 5249 |
| 55° | 4598 | 4897 | 5255 |
| 60° | 4425 | 4844 | 5268 |
| 65° | 4223 | 4749 | 5284 |
| 70° | 3936 | 4617 | 5307 |
| 75° | 3507 | 4433 | 5360 |
| 80° | 2900 | 4221 | 5621 |
| 85° | 1886 | 3812 | 4911 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5798 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 161.5  | 3.2       |
| 10°-20°   | 462.4  | 9.3       |
| 20°-30°   | 697.4  | 14.0      |
| 30°-40°   | 840.0  | 16.8      |
| 40°-50°   | 877.2  | 17.6      |
| 50°-60°   | 805.6  | 16.2      |
| 60°-70°   | 634.5  | 12.7      |
| 70°-80°   | 389.3  | 7.8       |
| 80°-90°   | 117.1  | 2.3       |
| 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°    | 1321.2 | 26.5      |
| 0°-40°    | 2161.2 | 43.4      |
| 0°-60°    | 3844.0 | 77.1      |
| 0°-90°    | 4985.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4985.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1708 | 1708  | 1708 | 1708  | 1708 |      |
| 5°  | 1693 | 1696  | 1700 | 1705  | 1699 | 161  |
| 15° | 1627 | 1630  | 1640 | 1650  | 1650 | 459  |
| 25° | 1492 | 1495  | 1513 | 1531  | 1531 | 687  |
| 35° | 1308 | 1315  | 1342 | 1370  | 1376 | 818  |
| 45° | 1090 | 1102  | 1135 | 1175  | 1186 | 840  |
| 55° | 842  | 858   | 897  | 947   | 963  | 752  |
| 65° | 570  | 590   | 641  | 695   | 713  | 564  |
| 75° | 290  | 313   | 366  | 424   | 443  | 307  |
| 85° | 52   | 72    | 106  | 134   | 137  | 69   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1707.5 | 1707.5 | 1707.5 | 1707.5 | 1707.5 |
| 2.5°  | 1700.9 | 1704.2 | 1705.3 | 1706.4 | 1698.7 |
| 5°    | 1693.3 | 1695.5 | 1699.8 | 1705.3 | 1698.7 |
| 7.5°  | 1682.3 | 1684.5 | 1690.0 | 1697.7 | 1694.4 |
| 10°   | 1670.3 | 1671.4 | 1678.0 | 1683.4 | 1676.9 |
| 12.5° | 1650.6 | 1653.9 | 1661.6 | 1665.9 | 1663.7 |
| 15°   | 1626.6 | 1629.8 | 1639.7 | 1649.5 | 1649.5 |
| 17.5° | 1598.1 | 1602.5 | 1614.5 | 1627.6 | 1628.7 |
| 20°   | 1566.4 | 1569.7 | 1585.0 | 1598.1 | 1598.1 |
| 22.5° | 1530.3 | 1534.7 | 1550.0 | 1564.2 | 1566.4 |
| 25°   | 1492.0 | 1495.3 | 1512.8 | 1531.4 | 1531.4 |
| 27.5° | 1447.2 | 1453.7 | 1475.6 | 1494.2 | 1498.6 |
| 30°   | 1403.4 | 1408.9 | 1432.9 | 1455.9 | 1459.2 |
| 32.5° | 1357.5 | 1364.0 | 1389.2 | 1414.3 | 1419.8 |
| 35°   | 1308.2 | 1314.8 | 1342.2 | 1369.5 | 1376.1 |
| 37.5° | 1256.8 | 1264.5 | 1292.9 | 1324.6 | 1331.2 |
| 40°   | 1203.2 | 1212.0 | 1242.6 | 1276.5 | 1283.1 |
| 42.5° | 1146.4 | 1158.4 | 1191.2 | 1226.2 | 1236.0 |
| 45°   | 1089.5 | 1101.5 | 1135.4 | 1174.8 | 1185.7 |
| 47.5° | 1029.3 | 1043.5 | 1078.5 | 1120.1 | 1132.1 |
| 50°   | 969.1  | 983.4  | 1019.5 | 1064.3 | 1077.4 |
| 52.5° | 907.9  | 922.1  | 959.3  | 1006.3 | 1020.6 |
| 55°   | 842.3  | 857.6  | 897.0  | 947.3  | 962.6  |
| 57.5° | 774.4  | 794.1  | 835.7  | 887.1  | 902.4  |
| 60°   | 706.6  | 726.3  | 773.4  | 823.7  | 841.2  |
| 62.5° | 639.9  | 658.5  | 706.6  | 760.2  | 778.8  |
| 65°   | 569.9  | 589.6  | 641.0  | 694.6  | 713.2  |
| 67.5° | 501.0  | 520.7  | 572.1  | 627.9  | 647.6  |
| 70°   | 429.9  | 451.8  | 504.3  | 560.0  | 579.7  |
| 72.5° | 358.8  | 381.8  | 435.4  | 492.2  | 510.8  |
| 75°   | 289.9  | 312.8  | 366.4  | 424.4  | 443.0  |
| 77.5° | 222.1  | 247.2  | 299.7  | 358.8  | 376.3  |
| 80°   | 160.8  | 184.9  | 234.1  | 292.1  | 311.7  |
| 82.5° | 102.8  | 123.6  | 172.8  | 227.5  | 241.7  |
| 85°   | 52.5   | 72.2   | 106.1  | 134.5  | 136.7  |
| 87.5° | 16.4   | 23.0   | 35.0   | 52.5   | 53.6   |
| 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 | 17.30            | 18.96 | 17.67 | 19.28 | 19.59 | 18.13          | 19.79 | 18.50 | 20.11 | 20.42 |
|                 | 3H   | 19.06            | 20.57 | 19.43 | 20.89 | 21.25 | 20.25          | 21.76 | 20.63 | 22.08 | 22.44 |
|                 | 4H   | 19.68            | 21.10 | 20.07 | 21.45 | 21.82 | 21.14          | 22.56 | 21.54 | 22.91 | 23.28 |
|                 | 6H   | 20.09            | 21.41 | 20.50 | 21.77 | 22.16 | 21.92          | 23.24 | 22.33 | 23.60 | 23.99 |
|                 | 8H   | 20.20            | 21.46 | 20.62 | 21.85 | 22.24 | 22.24          | 23.50 | 22.66 | 23.89 | 24.29 |
|                 | 12H  | 20.25            | 21.46 | 20.68 | 21.84 | 22.27 | 22.45          | 23.66 | 22.88 | 24.04 | 24.47 |
| 4H              | 2H   | 18.07            | 19.50 | 18.47 | 19.84 | 20.22 | 18.72          | 20.14 | 19.12 | 20.49 | 20.87 |
|                 | 3H   | 20.05            | 21.25 | 20.46 | 21.65 | 22.05 | 21.08          | 22.27 | 21.48 | 22.67 | 23.07 |
|                 | 4H   | 20.79            | 21.87 | 21.22 | 22.29 | 22.72 | 22.13          | 23.21 | 22.56 | 23.63 | 24.06 |
|                 | 6H   | 21.32            | 22.27 | 21.77 | 22.71 | 23.16 | 23.08          | 24.03 | 23.53 | 24.47 | 24.93 |
|                 | 8H   | 21.46            | 22.36 | 21.92 | 22.80 | 23.26 | 23.48          | 24.37 | 23.94 | 24.81 | 25.28 |
|                 | 12H  | 21.55            | 22.35 | 22.03 | 22.83 | 23.29 | 23.75          | 24.56 | 24.23 | 25.03 | 25.50 |
| 8H              | 4H   | 21.25            | 22.14 | 21.71 | 22.58 | 23.05 | 22.42          | 23.31 | 22.88 | 23.75 | 24.21 |
|                 | 6H   | 21.91            | 22.65 | 22.40 | 23.14 | 23.61 | 23.53          | 24.27 | 24.02 | 24.76 | 25.23 |
|                 | 8H   | 22.12            | 22.79 | 22.63 | 23.29 | 23.78 | 24.04          | 24.71 | 24.55 | 25.21 | 25.70 |
|                 | 12H  | 22.26            | 22.85 | 22.76 | 23.34 | 23.90 | 24.43          | 25.02 | 24.93 | 25.51 | 26.07 |
| 12H             | 4H   | 21.34            | 22.14 | 21.82 | 22.61 | 23.08 | 22.44          | 23.24 | 22.92 | 23.72 | 24.19 |
|                 | 6H   | 22.04            | 22.71 | 22.55 | 23.22 | 23.70 | 23.58          | 24.25 | 24.08 | 24.75 | 25.24 |
|                 | 8H   | 22.32            | 22.91 | 22.82 | 23.40 | 23.96 | 24.15          | 24.75 | 24.66 | 25.24 | 25.79 |