

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: P1586540

Luminaire Tested: 22CZSP-60HE-L850-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586540  
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-60HE-L850-S  
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 6700 lumens, 80CRI, Smooth Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

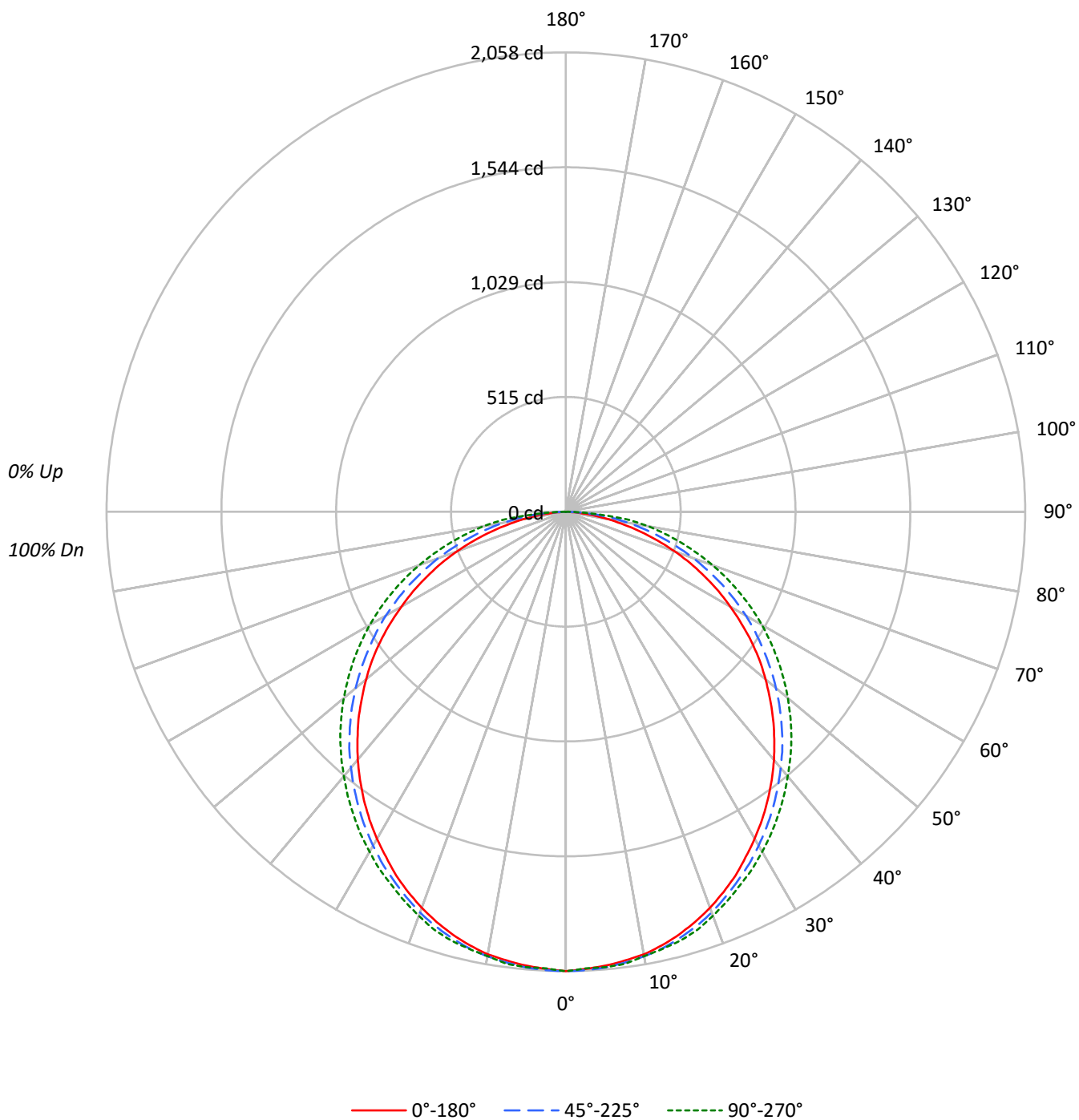
Lumens per Lamp: N/A  
Luminaire Lumens: 6009.0 lumens  
Efficiency: N/A  
Efficacy: 144.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 41.5  
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  | 106 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 88  |  | 89  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  |
| 3   | 89  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 61  |  | 69  |
| 4   | 82  | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 52  |  | 63  | 57  | 52  |  | 61  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  |  | 57  | 50  | 45  |  | 55  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  |  | 51  | 44  | 39  |  | 50  |
| 7   | 64  | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  |  | 47  | 40  | 35  |  | 45  |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  |  | 37  | 30  | 25  |  | 36  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6445 | 6445 | 6445 |
| 5°  | 6416 | 6441 | 6437 |
| 10° | 6402 | 6431 | 6427 |
| 15° | 6356 | 6407 | 6446 |
| 20° | 6292 | 6367 | 6419 |
| 25° | 6214 | 6300 | 6378 |
| 30° | 6117 | 6245 | 6360 |
| 35° | 6028 | 6185 | 6341 |
| 40° | 5929 | 6123 | 6322 |
| 45° | 5816 | 6061 | 6329 |
| 50° | 5691 | 5987 | 6327 |
| 55° | 5543 | 5903 | 6334 |
| 60° | 5335 | 5838 | 6350 |
| 65° | 5090 | 5725 | 6370 |
| 70° | 4744 | 5565 | 6398 |
| 75° | 4227 | 5344 | 6461 |
| 80° | 3495 | 5089 | 6777 |
| 85° | 2274 | 4595 | 5921 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6991 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 194.7  | 3.2       |
| 10°-20°   | 557.4  | 9.3       |
| 20°-30°   | 840.6  | 14.0      |
| 30°-40°   | 1012.5 | 16.8      |
| 40°-50°   | 1057.4 | 17.6      |
| 50°-60°   | 971.1  | 16.2      |
| 60°-70°   | 764.9  | 12.7      |
| 70°-80°   | 469.2  | 7.8       |
| 80°-90°   | 141.2  | 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°    | 1592.7 | 26.5      |
| 0°-40°    | 2605.2 | 43.4      |
| 0°-60°    | 4633.7 | 77.1      |
| 0°-90°    | 6009.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6009.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2058 | 2058  | 2058 | 2058  | 2058 |      |
| 5°  | 2041 | 2044  | 2049 | 2056  | 2048 | 194  |
| 15° | 1961 | 1965  | 1976 | 1988  | 1988 | 553  |
| 25° | 1798 | 1802  | 1824 | 1846  | 1846 | 828  |
| 35° | 1577 | 1585  | 1618 | 1651  | 1659 | 986  |
| 45° | 1313 | 1328  | 1369 | 1416  | 1429 | 1013 |
| 55° | 1015 | 1034  | 1081 | 1142  | 1160 | 906  |
| 65° | 687  | 711   | 773  | 837   | 860  | 680  |
| 75° | 349  | 377   | 442  | 512   | 534  | 370  |
| 85° | 63   | 87    | 128  | 162   | 165  | 83   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2058.2 | 2058.2 | 2058.2 | 2058.2 | 2058.2 |
| 2.5°  | 2050.3 | 2054.3 | 2055.6 | 2056.9 | 2047.7 |
| 5°    | 2041.1 | 2043.7 | 2049.0 | 2055.6 | 2047.7 |
| 7.5°  | 2027.9 | 2030.6 | 2037.1 | 2046.4 | 2042.4 |
| 10°   | 2013.4 | 2014.7 | 2022.6 | 2029.2 | 2021.3 |
| 12.5° | 1989.7 | 1993.6 | 2002.9 | 2008.1 | 2005.5 |
| 15°   | 1960.7 | 1964.6 | 1976.5 | 1988.4 | 1988.4 |
| 17.5° | 1926.4 | 1931.7 | 1946.2 | 1962.0 | 1963.3 |
| 20°   | 1888.2 | 1892.1 | 1910.6 | 1926.4 | 1926.4 |
| 22.5° | 1844.6 | 1849.9 | 1868.4 | 1885.5 | 1888.2 |
| 25°   | 1798.5 | 1802.4 | 1823.5 | 1846.0 | 1846.0 |
| 27.5° | 1744.4 | 1752.3 | 1778.7 | 1801.1 | 1806.4 |
| 30°   | 1691.7 | 1698.3 | 1727.3 | 1755.0 | 1758.9 |
| 32.5° | 1636.3 | 1644.2 | 1674.5 | 1704.9 | 1711.5 |
| 35°   | 1577.0 | 1584.9 | 1617.9 | 1650.8 | 1658.7 |
| 37.5° | 1515.0 | 1524.2 | 1558.5 | 1596.8 | 1604.7 |
| 40°   | 1450.4 | 1460.9 | 1497.9 | 1538.7 | 1546.6 |
| 42.5° | 1381.8 | 1396.3 | 1435.9 | 1478.1 | 1490.0 |
| 45°   | 1313.3 | 1327.8 | 1368.6 | 1416.1 | 1429.3 |
| 47.5° | 1240.7 | 1257.9 | 1300.1 | 1350.2 | 1364.7 |
| 50°   | 1168.2 | 1185.4 | 1228.9 | 1282.9 | 1298.8 |
| 52.5° | 1094.4 | 1111.5 | 1156.4 | 1213.1 | 1230.2 |
| 55°   | 1015.3 | 1033.7 | 1081.2 | 1141.9 | 1160.3 |
| 57.5° | 933.5  | 957.3  | 1007.4 | 1069.3 | 1087.8 |
| 60°   | 851.8  | 875.5  | 932.2  | 992.9  | 1014.0 |
| 62.5° | 771.3  | 793.8  | 851.8  | 916.4  | 938.8  |
| 65°   | 687.0  | 710.7  | 772.7  | 837.3  | 859.7  |
| 67.5° | 603.9  | 627.6  | 689.6  | 756.8  | 780.6  |
| 70°   | 518.2  | 544.6  | 607.8  | 675.1  | 698.8  |
| 72.5° | 432.5  | 460.2  | 524.8  | 593.3  | 615.8  |
| 75°   | 349.4  | 377.1  | 441.7  | 511.6  | 534.0  |
| 77.5° | 267.7  | 298.0  | 361.3  | 432.5  | 453.6  |
| 80°   | 193.8  | 222.8  | 282.2  | 352.1  | 375.8  |
| 82.5° | 123.9  | 149.0  | 208.3  | 274.3  | 291.4  |
| 85°   | 63.3   | 87.0   | 127.9  | 162.2  | 164.8  |
| 87.5° | 19.8   | 27.7   | 42.2   | 63.3   | 64.6   |
| 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 | 17.95            | 19.61 | 18.32 | 19.93 | 20.24 | 18.78          | 20.44 | 19.15 | 20.76 | 21.07 |
|                 | 3H   | 19.71            | 21.21 | 20.08 | 21.54 | 21.90 | 20.90          | 22.41 | 21.27 | 22.73 | 23.09 |
|                 | 4H   | 20.33            | 21.75 | 20.72 | 22.10 | 22.47 | 21.79          | 23.21 | 22.18 | 23.56 | 23.93 |
|                 | 6H   | 20.74            | 22.06 | 21.15 | 22.42 | 22.81 | 22.57          | 23.89 | 22.98 | 24.25 | 24.64 |
|                 | 8H   | 20.84            | 22.11 | 21.27 | 22.50 | 22.89 | 22.89          | 24.15 | 23.31 | 24.54 | 24.94 |
|                 | 12H  | 20.90            | 22.11 | 21.33 | 22.49 | 22.92 | 23.10          | 24.31 | 23.53 | 24.69 | 25.12 |
| 4H              | 2H   | 18.72            | 20.15 | 19.12 | 20.49 | 20.87 | 19.37          | 20.79 | 19.77 | 21.14 | 21.51 |
|                 | 3H   | 20.70            | 21.90 | 21.11 | 22.30 | 22.69 | 21.72          | 22.92 | 22.13 | 23.32 | 23.72 |
|                 | 4H   | 21.44            | 22.52 | 21.87 | 22.94 | 23.37 | 22.78          | 23.86 | 23.21 | 24.28 | 24.71 |
|                 | 6H   | 21.97            | 22.92 | 22.42 | 23.36 | 23.81 | 23.73          | 24.68 | 24.18 | 25.12 | 25.58 |
|                 | 8H   | 22.11            | 23.00 | 22.57 | 23.45 | 23.91 | 24.13          | 25.02 | 24.59 | 25.46 | 25.92 |
|                 | 12H  | 22.20            | 23.00 | 22.68 | 23.47 | 23.94 | 24.40          | 25.21 | 24.88 | 25.68 | 26.15 |
| 8H              | 4H   | 21.90            | 22.79 | 22.36 | 23.23 | 23.69 | 23.07          | 23.96 | 23.52 | 24.40 | 24.86 |
|                 | 6H   | 22.56            | 23.30 | 23.05 | 23.79 | 24.26 | 24.18          | 24.92 | 24.67 | 25.41 | 25.88 |
|                 | 8H   | 22.77            | 23.44 | 23.28 | 23.94 | 24.43 | 24.69          | 25.36 | 25.20 | 25.86 | 26.35 |
|                 | 12H  | 22.91            | 23.50 | 23.41 | 23.99 | 24.55 | 25.08          | 25.67 | 25.58 | 26.16 | 26.72 |
| 12H             | 4H   | 21.99            | 22.79 | 22.47 | 23.26 | 23.73 | 23.09          | 23.89 | 23.57 | 24.37 | 24.84 |
|                 | 6H   | 22.69            | 23.36 | 23.20 | 23.86 | 24.35 | 24.23          | 24.89 | 24.73 | 25.40 | 25.88 |
|                 | 8H   | 22.97            | 23.56 | 23.47 | 24.05 | 24.61 | 24.80          | 25.40 | 25.31 | 25.88 | 26.44 |