

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: P1584778

Luminaire Tested: 14CZSP-A-70VHE-L845-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1584778  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 14CZSP-A-70VHE-L845-S  
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 7200 lumens, 80CRI, Smooth Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

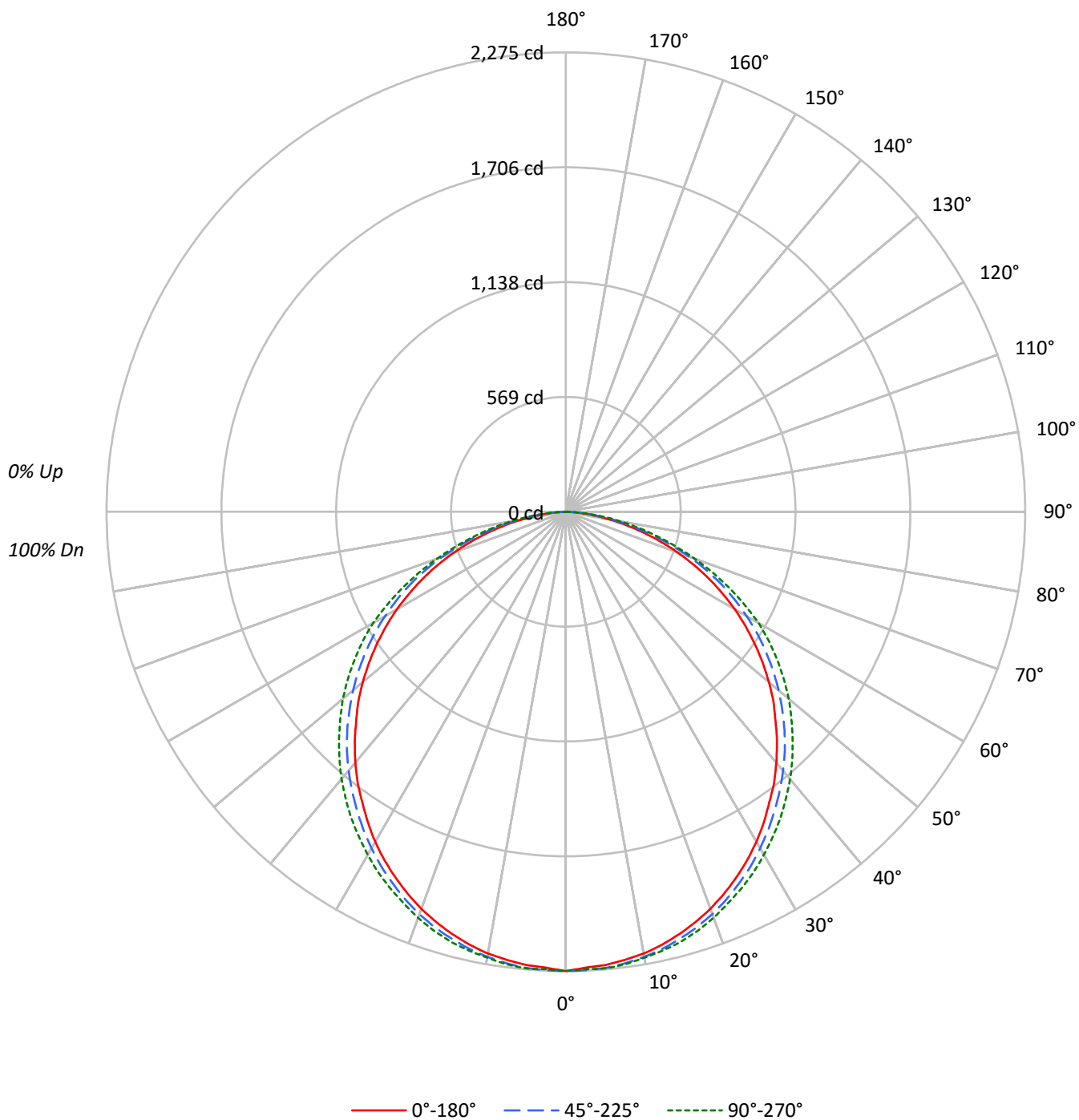
Lumens per Lamp: N/A  
Luminaire Lumens: 6576.0 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 51.9  
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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  |  | 93  | 91  | 88  |  | 90  |
| 2   | 99  | 90  | 83  | 78  | 96  | 88  | 82  | 77  | 85  | 80  | 75  |  | 82  | 77  | 73  |  | 79  |
| 3   | 90  | 79  | 71  | 64  | 87  | 78  | 70  | 64  | 75  | 68  | 63  |  | 72  | 66  | 62  |  | 69  |
| 4   | 82  | 70  | 61  | 54  | 80  | 69  | 60  | 54  | 66  | 59  | 53  |  | 64  | 58  | 52  |  | 62  |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  |  | 57  | 51  | 45  |  | 55  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 53  | 46  | 40  |  | 52  | 45  | 40  |  | 50  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 35  |  | 47  | 40  | 35  |  | 46  |
| 8   | 60  | 46  | 38  | 32  | 59  | 46  | 38  | 32  | 44  | 37  | 32  |  | 43  | 36  | 31  |  | 42  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 28  |  | 40  | 33  | 28  |  | 39  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  |  | 37  | 30  | 26  |  | 36  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7664 | 7664 | 7664 |
| 5°  | 7622 | 7671 | 7677 |
| 10° | 7601 | 7657 | 7674 |
| 15° | 7557 | 7634 | 7689 |
| 20° | 7504 | 7604 | 7674 |
| 25° | 7428 | 7547 | 7651 |
| 30° | 7344 | 7487 | 7634 |
| 35° | 7227 | 7422 | 7621 |
| 40° | 7132 | 7362 | 7600 |
| 45° | 6997 | 7297 | 7569 |
| 50° | 6880 | 7210 | 7555 |
| 55° | 6715 | 7108 | 7506 |
| 60° | 6510 | 6967 | 7430 |
| 65° | 6221 | 6776 | 7123 |
| 70° | 5798 | 6399 | 6685 |
| 75° | 5179 | 5771 | 6099 |
| 80° | 4246 | 4865 | 5334 |
| 85° | 2845 | 3557 | 3967 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7569 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 215.4  | 3.3       |
| 10°-20°   | 617.6  | 9.4       |
| 20°-30°   | 935.2  | 14.2      |
| 30°-40°   | 1129.3 | 17.2      |
| 40°-50°   | 1180.2 | 17.9      |
| 50°-60°   | 1081.5 | 16.4      |
| 60°-70°   | 834.8  | 12.7      |
| 70°-80°   | 469.6  | 7.1       |
| 80°-90°   | 112.4  | 1.7       |
| 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°    | 1768.2 | 26.9      |
| 0°-40°    | 2897.5 | 44.1      |
| 0°-60°    | 5159.2 | 78.5      |
| 0°-90°    | 6576.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6576.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2275 | 2275  | 2275 | 2275  | 2275 |      |
| 5°  | 2253 | 2270  | 2268 | 2270  | 2270 | 214  |
| 15° | 2166 | 2184  | 2188 | 2197  | 2204 | 611  |
| 25° | 1998 | 2015  | 2030 | 2040  | 2058 | 921  |
| 35° | 1757 | 1779  | 1804 | 1828  | 1853 | 1101 |
| 45° | 1468 | 1497  | 1531 | 1562  | 1588 | 1135 |
| 55° | 1143 | 1173  | 1210 | 1248  | 1278 | 1021 |
| 65° | 780  | 814   | 850  | 884   | 893  | 771  |
| 75° | 398  | 435   | 443  | 462   | 468  | 422  |
| 85° | 74   | 84    | 92   | 101   | 103  | 95   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2274.6 | 2274.6 | 2274.6 | 2274.6 | 2274.6 |
| 2.5°  | 2259.2 | 2276.6 | 2272.7 | 2278.5 | 2267.9 |
| 5°    | 2253.3 | 2269.8 | 2267.9 | 2269.8 | 2269.8 |
| 7.5°  | 2238.8 | 2256.3 | 2255.3 | 2258.2 | 2260.1 |
| 10°   | 2221.4 | 2237.9 | 2237.9 | 2240.8 | 2242.7 |
| 12.5° | 2197.2 | 2214.6 | 2216.6 | 2221.4 | 2225.3 |
| 15°   | 2166.2 | 2183.7 | 2188.5 | 2197.2 | 2204.0 |
| 17.5° | 2131.4 | 2149.8 | 2157.5 | 2166.2 | 2174.9 |
| 20°   | 2092.7 | 2109.1 | 2120.7 | 2127.5 | 2140.1 |
| 22.5° | 2047.2 | 2065.6 | 2078.2 | 2084.9 | 2098.5 |
| 25°   | 1997.8 | 2015.2 | 2029.8 | 2040.4 | 2057.8 |
| 27.5° | 1945.5 | 1963.0 | 1980.4 | 1993.0 | 2013.3 |
| 30°   | 1887.5 | 1905.9 | 1924.3 | 1943.6 | 1962.0 |
| 32.5° | 1824.6 | 1845.8 | 1866.2 | 1887.5 | 1907.8 |
| 35°   | 1756.8 | 1779.1 | 1804.2 | 1828.4 | 1852.6 |
| 37.5° | 1693.9 | 1714.2 | 1740.3 | 1766.5 | 1790.7 |
| 40°   | 1621.3 | 1643.6 | 1673.6 | 1702.6 | 1727.8 |
| 42.5° | 1547.7 | 1571.9 | 1604.8 | 1632.9 | 1660.0 |
| 45°   | 1468.4 | 1497.4 | 1531.3 | 1562.2 | 1588.4 |
| 47.5° | 1394.8 | 1420.0 | 1453.8 | 1487.7 | 1514.8 |
| 50°   | 1312.5 | 1340.6 | 1375.4 | 1411.2 | 1441.3 |
| 52.5° | 1229.3 | 1258.3 | 1294.1 | 1329.9 | 1360.9 |
| 55°   | 1143.1 | 1173.1 | 1209.9 | 1247.7 | 1277.7 |
| 57.5° | 1055.0 | 1087.0 | 1124.7 | 1162.5 | 1192.5 |
| 60°   | 966.0  | 997.9  | 1033.8 | 1075.4 | 1102.5 |
| 62.5° | 873.1  | 908.9  | 942.8  | 981.5  | 997.9  |
| 65°   | 780.2  | 814.0  | 849.8  | 883.7  | 893.4  |
| 67.5° | 685.3  | 720.1  | 752.1  | 774.3  | 786.9  |
| 70°   | 588.5  | 626.3  | 649.5  | 670.8  | 678.5  |
| 72.5° | 492.7  | 530.4  | 544.0  | 564.3  | 572.0  |
| 75°   | 397.8  | 434.6  | 443.3  | 461.7  | 468.5  |
| 77.5° | 305.9  | 339.7  | 342.6  | 363.9  | 369.8  |
| 80°   | 218.8  | 245.9  | 250.7  | 271.0  | 274.9  |
| 82.5° | 140.4  | 159.7  | 166.5  | 183.9  | 189.7  |
| 85°   | 73.6   | 84.2   | 92.0   | 100.7  | 102.6  |
| 87.5° | 24.2   | 30.0   | 25.2   | 26.1   | 24.2   |
| 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 | 18.79            | 20.44 | 19.15 | 20.75 | 21.07 | 19.33          | 20.98 | 19.69 | 21.29 | 21.61 |
|                 | 3H   | 20.56            | 22.06 | 20.94 | 22.38 | 22.74 | 21.18          | 22.68 | 21.56 | 23.00 | 23.36 |
|                 | 4H   | 21.19            | 22.60 | 21.59 | 22.94 | 23.32 | 21.85          | 23.26 | 22.25 | 23.61 | 23.98 |
|                 | 6H   | 21.60            | 22.90 | 22.01 | 23.27 | 23.66 | 22.33          | 23.64 | 22.74 | 24.00 | 24.39 |
|                 | 8H   | 21.70            | 22.95 | 22.13 | 23.34 | 23.74 | 22.48          | 23.72 | 22.90 | 24.11 | 24.51 |
|                 | 12H  | 21.75            | 22.95 | 22.18 | 23.33 | 23.76 | 22.56          | 23.75 | 22.99 | 24.14 | 24.56 |
| 4H              | 2H   | 19.51            | 20.92 | 19.91 | 21.27 | 21.64 | 19.93          | 21.34 | 20.33 | 21.69 | 22.06 |
|                 | 3H   | 21.51            | 22.69 | 21.92 | 23.08 | 23.48 | 22.01          | 23.19 | 22.42 | 23.58 | 23.98 |
|                 | 4H   | 22.26            | 23.33 | 22.70 | 23.75 | 24.18 | 22.80          | 23.87 | 23.23 | 24.28 | 24.72 |
|                 | 6H   | 22.79            | 23.73 | 23.25 | 24.17 | 24.62 | 23.41          | 24.34 | 23.86 | 24.78 | 25.23 |
|                 | 8H   | 22.93            | 23.81 | 23.39 | 24.25 | 24.71 | 23.60          | 24.47 | 24.06 | 24.91 | 25.38 |
|                 | 12H  | 23.01            | 23.80 | 23.49 | 24.27 | 24.74 | 23.72          | 24.50 | 24.20 | 24.98 | 25.45 |
| 8H              | 4H   | 22.60            | 23.48 | 23.06 | 23.92 | 24.38 | 23.08          | 23.95 | 23.54 | 24.39 | 24.86 |
|                 | 6H   | 23.24            | 23.97 | 23.73 | 24.46 | 24.93 | 23.79          | 24.52 | 24.28 | 25.00 | 25.48 |
|                 | 8H   | 23.44            | 24.09 | 23.95 | 24.60 | 25.08 | 24.05          | 24.70 | 24.56 | 25.20 | 25.69 |
|                 | 12H  | 23.57            | 24.15 | 24.08 | 24.64 | 25.20 | 24.23          | 24.81 | 24.74 | 25.30 | 25.86 |
| 12H             | 4H   | 22.64            | 23.42 | 23.12 | 23.90 | 24.37 | 23.10          | 23.89 | 23.58 | 24.36 | 24.83 |
|                 | 6H   | 23.30            | 23.95 | 23.81 | 24.45 | 24.94 | 23.83          | 24.48 | 24.34 | 24.99 | 25.47 |
|                 | 8H   | 23.55            | 24.12 | 24.05 | 24.61 | 25.17 | 24.14          | 24.71 | 24.64 | 25.20 | 25.76 |