

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: P1584458

Luminaire Tested: 14CZSP-70-L845-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1584458  
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-70-L845-S  
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 6700 lumens, 80CRI, Smooth Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

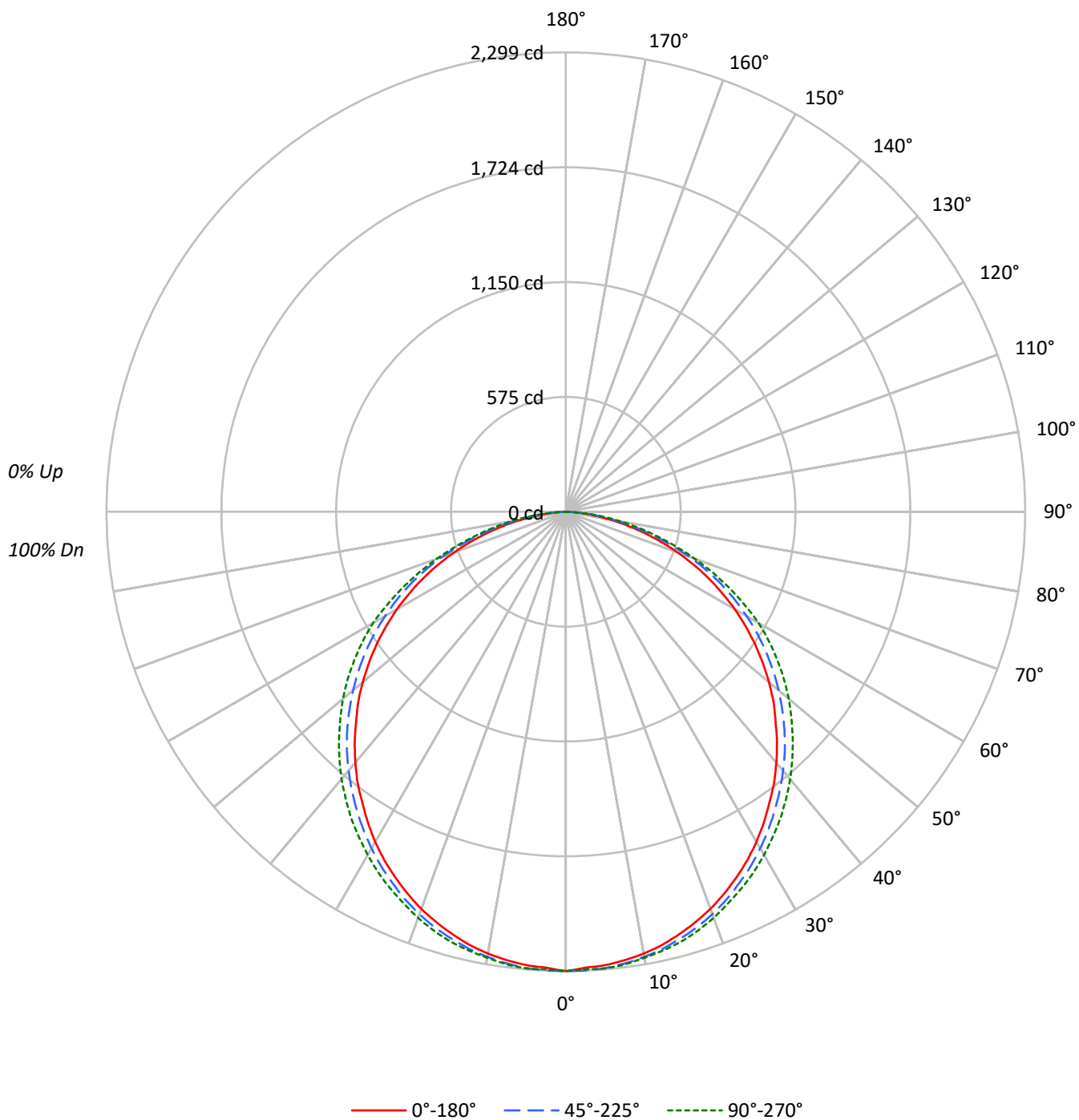
Lumens per Lamp: N/A  
Luminaire Lumens: 6647.0 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 53.4  
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

TEST NUMBER: P1584458

CATALOG NUMBER: 14CZSP-70-L845-S

### Luminous Intensity Polar Plot



TEST NUMBER: P1584458

CATALOG NUMBER: 14CZSP-70-L845-S

**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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  |  | 93  | 91  | 88  |  | 90  | 88  | 86  | 84  |
| 2   | 99  | 90  | 83  | 78  | 96  | 88  | 82  | 77  | 85  | 80  | 75  |  | 82  | 77  | 73  |  | 79  | 75  | 72  | 69  |
| 3   | 90  | 79  | 71  | 64  | 87  | 78  | 70  | 64  | 75  | 68  | 63  |  | 72  | 66  | 62  |  | 69  | 65  | 60  | 58  |
| 4   | 82  | 70  | 61  | 54  | 80  | 69  | 60  | 54  | 66  | 59  | 53  |  | 64  | 58  | 52  |  | 62  | 56  | 52  | 50  |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  |  | 57  | 51  | 45  |  | 55  | 50  | 45  | 43  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 53  | 46  | 40  |  | 52  | 45  | 40  |  | 50  | 44  | 39  | 37  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 35  |  | 47  | 40  | 35  |  | 46  | 40  | 35  | 33  |
| 8   | 60  | 46  | 38  | 32  | 59  | 46  | 38  | 32  | 44  | 37  | 32  |  | 43  | 36  | 31  |  | 42  | 36  | 31  | 29  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 28  |  | 40  | 33  | 28  |  | 39  | 33  | 28  | 26  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  |  | 37  | 30  | 26  |  | 36  | 30  | 26  | 24  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7747 | 7747 | 7747 |
| 5°  | 7704 | 7754 | 7760 |
| 10° | 7683 | 7740 | 7756 |
| 15° | 7638 | 7717 | 7772 |
| 20° | 7585 | 7687 | 7757 |
| 25° | 7508 | 7628 | 7733 |
| 30° | 7423 | 7568 | 7716 |
| 35° | 7305 | 7502 | 7703 |
| 40° | 7209 | 7441 | 7682 |
| 45° | 7073 | 7376 | 7651 |
| 50° | 6955 | 7288 | 7637 |
| 55° | 6788 | 7185 | 7587 |
| 60° | 6580 | 7042 | 7510 |
| 65° | 6288 | 6849 | 7200 |
| 70° | 5861 | 6468 | 6756 |
| 75° | 5235 | 5834 | 6165 |
| 80° | 4290 | 4917 | 5393 |
| 85° | 2876 | 3592 | 4009 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7651 cd/sqm

TEST NUMBER: P1584458

CATALOG NUMBER: 14CZSP-70-L845-S

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 217.8  | 3.3       |
| 10°-20°   | 624.3  | 9.4       |
| 20°-30°   | 945.3  | 14.2      |
| 30°-40°   | 1141.5 | 17.2      |
| 40°-50°   | 1193.0 | 17.9      |
| 50°-60°   | 1093.2 | 16.4      |
| 60°-70°   | 843.8  | 12.7      |
| 70°-80°   | 474.7  | 7.1       |
| 80°-90°   | 113.6  | 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°    | 1787.3 | 26.9      |
| 0°-40°    | 2928.8 | 44.1      |
| 0°-60°    | 5214.9 | 78.5      |
| 0°-90°    | 6647.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6647.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2299 | 2299  | 2299 | 2299  | 2299 |      |
| 5°  | 2278 | 2294  | 2292 | 2294  | 2294 | 216  |
| 15° | 2190 | 2207  | 2212 | 2221  | 2228 | 618  |
| 25° | 2019 | 2037  | 2052 | 2062  | 2080 | 931  |
| 35° | 1776 | 1798  | 1824 | 1848  | 1873 | 1113 |
| 45° | 1484 | 1514  | 1548 | 1579  | 1606 | 1147 |
| 55° | 1156 | 1186  | 1223 | 1261  | 1292 | 1032 |
| 65° | 789  | 823   | 859  | 893   | 903  | 779  |
| 75° | 402  | 439   | 448  | 467   | 474  | 426  |
| 85° | 74   | 85    | 93   | 102   | 104  | 96   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1584458

CATALOG NUMBER: 14CZSP-70-L845-S

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2299.2 | 2299.2 | 2299.2 | 2299.2 | 2299.2 |
| 2.5°  | 2283.5 | 2301.2 | 2297.2 | 2303.1 | 2292.4 |
| 5°    | 2277.7 | 2294.3 | 2292.4 | 2294.3 | 2294.3 |
| 7.5°  | 2263.0 | 2280.6 | 2279.6 | 2282.6 | 2284.5 |
| 10°   | 2245.4 | 2262.0 | 2262.0 | 2265.0 | 2266.9 |
| 12.5° | 2220.9 | 2238.5 | 2240.5 | 2245.4 | 2249.3 |
| 15°   | 2189.6 | 2207.2 | 2212.1 | 2220.9 | 2227.8 |
| 17.5° | 2154.4 | 2173.0 | 2180.8 | 2189.6 | 2198.4 |
| 20°   | 2115.3 | 2131.9 | 2143.6 | 2150.5 | 2163.2 |
| 22.5° | 2069.3 | 2087.9 | 2100.6 | 2107.4 | 2121.1 |
| 25°   | 2019.4 | 2037.0 | 2051.7 | 2062.4 | 2080.0 |
| 27.5° | 1966.6 | 1984.2 | 2001.8 | 2014.5 | 2035.0 |
| 30°   | 1907.8 | 1926.4 | 1945.0 | 1964.6 | 1983.2 |
| 32.5° | 1844.3 | 1865.8 | 1886.3 | 1907.8 | 1928.4 |
| 35°   | 1775.8 | 1798.3 | 1823.7 | 1848.2 | 1872.6 |
| 37.5° | 1712.2 | 1732.7 | 1759.1 | 1785.6 | 1810.0 |
| 40°   | 1638.8 | 1661.3 | 1691.6 | 1721.0 | 1746.4 |
| 42.5° | 1564.4 | 1588.9 | 1622.2 | 1650.5 | 1677.9 |
| 45°   | 1484.2 | 1513.6 | 1547.8 | 1579.1 | 1605.5 |
| 47.5° | 1409.9 | 1435.3 | 1469.5 | 1503.8 | 1531.2 |
| 50°   | 1326.7 | 1355.1 | 1390.3 | 1426.5 | 1456.8 |
| 52.5° | 1242.5 | 1271.9 | 1308.1 | 1344.3 | 1375.6 |
| 55°   | 1155.5 | 1185.8 | 1223.0 | 1261.1 | 1291.5 |
| 57.5° | 1066.4 | 1098.7 | 1136.9 | 1175.0 | 1205.4 |
| 60°   | 976.4  | 1008.7 | 1044.9 | 1087.0 | 1114.4 |
| 62.5° | 882.5  | 918.7  | 952.9  | 992.1  | 1008.7 |
| 65°   | 788.6  | 822.8  | 859.0  | 893.3  | 903.0  |
| 67.5° | 692.7  | 727.9  | 760.2  | 782.7  | 795.4  |
| 70°   | 594.9  | 633.0  | 656.5  | 678.0  | 685.8  |
| 72.5° | 498.0  | 536.2  | 549.9  | 570.4  | 578.2  |
| 75°   | 402.1  | 439.3  | 448.1  | 466.7  | 473.5  |
| 77.5° | 309.2  | 343.4  | 346.3  | 367.9  | 373.7  |
| 80°   | 221.1  | 248.5  | 253.4  | 273.9  | 277.9  |
| 82.5° | 141.9  | 161.4  | 168.3  | 185.9  | 191.8  |
| 85°   | 74.4   | 85.1   | 92.9   | 101.8  | 103.7  |
| 87.5° | 24.5   | 30.3   | 25.4   | 26.4   | 24.5   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1584458

CATALOG NUMBER: 14CZSP-70-L845-S

**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 | 18.83            | 20.48 | 19.19 | 20.79 | 21.10 | 19.37          | 21.02 | 19.73 | 21.33 | 21.64 |
|                 | 3H   | 20.60            | 22.09 | 20.98 | 22.42 | 22.78 | 21.22          | 22.72 | 21.60 | 23.04 | 23.40 |
|                 | 4H   | 21.23            | 22.63 | 21.63 | 22.98 | 23.36 | 21.89          | 23.30 | 22.29 | 23.65 | 24.02 |
|                 | 6H   | 21.64            | 22.94 | 22.05 | 23.30 | 23.70 | 22.37          | 23.67 | 22.78 | 24.04 | 24.43 |
|                 | 8H   | 21.74            | 22.99 | 22.16 | 23.37 | 23.77 | 22.51          | 23.76 | 22.94 | 24.15 | 24.55 |
|                 | 12H  | 21.79            | 22.98 | 22.22 | 23.37 | 23.79 | 22.60          | 23.79 | 23.03 | 24.17 | 24.60 |
| 4H              | 2H   | 19.55            | 20.96 | 19.95 | 21.30 | 21.68 | 19.97          | 21.38 | 20.37 | 21.73 | 22.10 |
|                 | 3H   | 21.54            | 22.73 | 21.95 | 23.12 | 23.52 | 22.04          | 23.22 | 22.45 | 23.62 | 24.02 |
|                 | 4H   | 22.30            | 23.37 | 22.73 | 23.78 | 24.22 | 22.84          | 23.91 | 23.27 | 24.32 | 24.76 |
|                 | 6H   | 22.83            | 23.76 | 23.28 | 24.20 | 24.66 | 23.44          | 24.38 | 23.90 | 24.82 | 25.27 |
|                 | 8H   | 22.97            | 23.84 | 23.43 | 24.28 | 24.75 | 23.63          | 24.51 | 24.09 | 24.95 | 25.41 |
|                 | 12H  | 23.05            | 23.83 | 23.53 | 24.31 | 24.78 | 23.75          | 24.54 | 24.23 | 25.01 | 25.48 |
| 8H              | 4H   | 22.64            | 23.51 | 23.10 | 23.95 | 24.42 | 23.12          | 23.99 | 23.58 | 24.43 | 24.90 |
|                 | 6H   | 23.28            | 24.01 | 23.77 | 24.49 | 24.97 | 23.83          | 24.55 | 24.32 | 25.04 | 25.52 |
|                 | 8H   | 23.48            | 24.13 | 23.99 | 24.64 | 25.12 | 24.09          | 24.74 | 24.59 | 25.24 | 25.73 |
|                 | 12H  | 23.61            | 24.18 | 24.11 | 24.67 | 25.23 | 24.27          | 24.84 | 24.77 | 25.33 | 25.89 |
| 12H             | 4H   | 22.68            | 23.46 | 23.16 | 23.94 | 24.41 | 23.14          | 23.93 | 23.62 | 24.40 | 24.87 |
|                 | 6H   | 23.33            | 23.99 | 23.84 | 24.49 | 24.98 | 23.87          | 24.52 | 24.37 | 25.02 | 25.51 |
|                 | 8H   | 23.59            | 24.16 | 24.09 | 24.65 | 25.21 | 24.17          | 24.75 | 24.68 | 25.24 | 25.80 |