

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: P1584619

Luminaire Tested: 14CZSP-A-47-L845

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1584619  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-724-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 14CZSP-A-47-L845  
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Ribbed Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

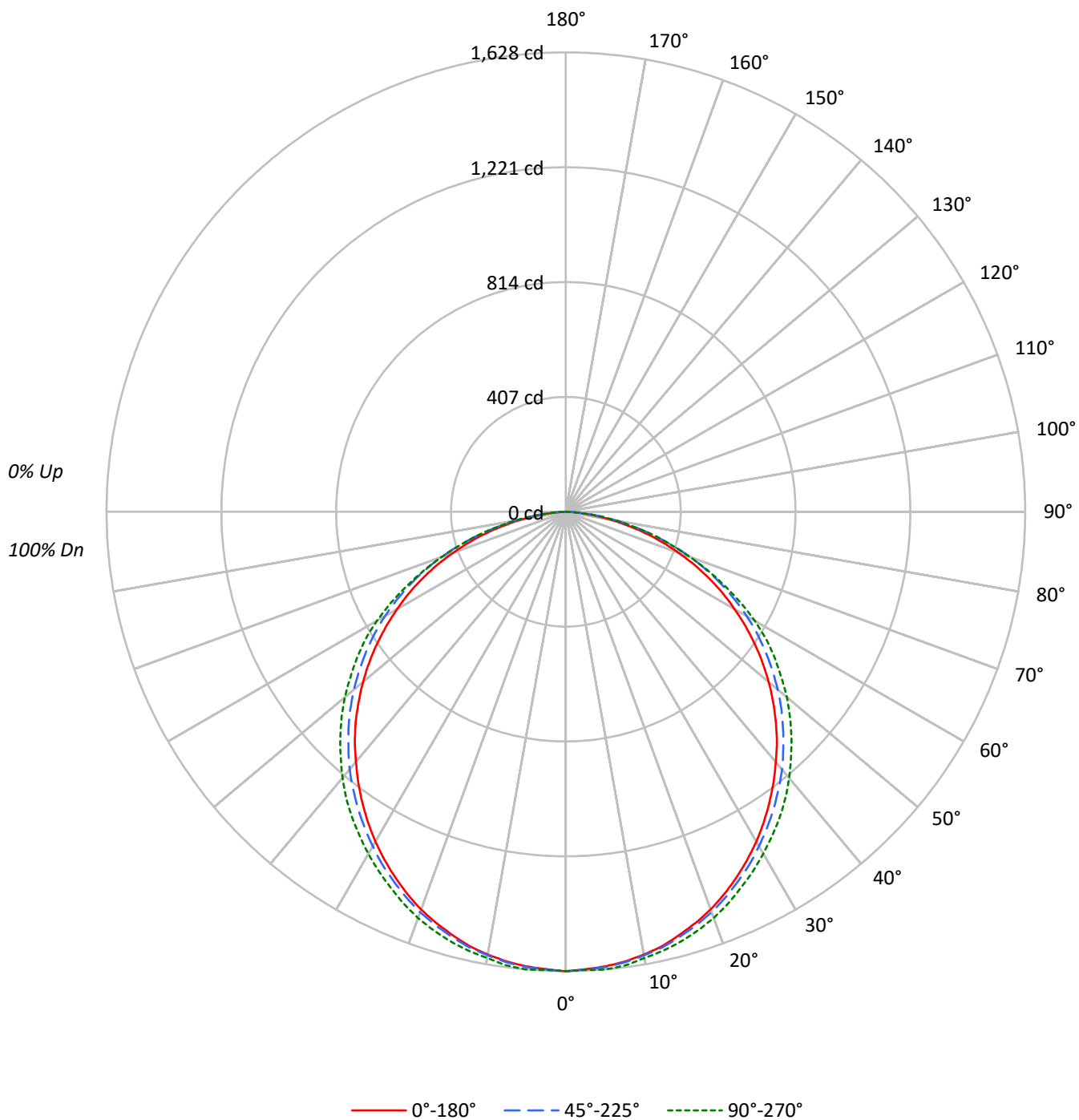
Lumens per Lamp: N/A  
Luminaire Lumens: 4698.0 lumens  
Efficiency: N/A  
Efficacy: 143.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 32.8  
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  | 53  |  | 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  | 29  |  | 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°  | 5486 | 5486 | 5486 |
| 5°  | 5469 | 5479 | 5507 |
| 10° | 5452 | 5461 | 5495 |
| 15° | 5418 | 5442 | 5500 |
| 20° | 5379 | 5414 | 5494 |
| 25° | 5318 | 5370 | 5463 |
| 30° | 5251 | 5327 | 5446 |
| 35° | 5174 | 5283 | 5437 |
| 40° | 5091 | 5244 | 5416 |
| 45° | 5018 | 5190 | 5389 |
| 50° | 4921 | 5140 | 5359 |
| 55° | 4803 | 5073 | 5310 |
| 60° | 4655 | 4994 | 5209 |
| 65° | 4475 | 4853 | 4953 |
| 70° | 4199 | 4611 | 4611 |
| 75° | 3772 | 4188 | 4206 |
| 80° | 3109 | 3541 | 3541 |
| 85° | 2153 | 2586 | 2262 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5389 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 154.2  | 3.3       |
| 10°-20°   | 441.7  | 9.4       |
| 20°-30°   | 668.5  | 14.2      |
| 30°-40°   | 807.0  | 17.2      |
| 40°-50°   | 843.1  | 17.9      |
| 50°-60°   | 772.4  | 16.4      |
| 60°-70°   | 595.5  | 12.7      |
| 70°-80°   | 336.0  | 7.2       |
| 80°-90°   | 79.5   | 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°    | 1264.4 | 26.9      |
| 0°-40°    | 2071.5 | 44.1      |
| 0°-60°    | 3687.0 | 78.5      |
| 0°-90°    | 4698.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4698.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1628 | 1628  | 1628 | 1628  | 1628 |      |
| 5°  | 1617 | 1628  | 1620 | 1623  | 1628 | 154  |
| 15° | 1553 | 1563  | 1560 | 1572  | 1577 | 438  |
| 25° | 1430 | 1443  | 1444 | 1464  | 1469 | 659  |
| 35° | 1258 | 1274  | 1284 | 1312  | 1322 | 787  |
| 45° | 1053 | 1071  | 1089 | 1121  | 1131 | 812  |
| 55° | 818  | 838   | 864  | 896   | 904  | 730  |
| 65° | 561  | 579   | 609  | 630   | 621  | 555  |
| 75° | 290  | 312   | 322  | 330   | 323  | 307  |
| 85° | 56   | 63    | 67   | 71    | 58   | 70   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1628.2 | 1628.2 | 1628.2 | 1628.2 | 1628.2 |
| 2.5°  | 1622.6 | 1633.7 | 1622.6 | 1628.2 | 1625.4 |
| 5°    | 1617.0 | 1628.2 | 1619.8 | 1622.6 | 1628.2 |
| 7.5°  | 1607.3 | 1618.4 | 1610.1 | 1614.2 | 1621.2 |
| 10°   | 1593.4 | 1604.5 | 1596.1 | 1603.1 | 1605.9 |
| 12.5° | 1576.6 | 1586.4 | 1580.8 | 1589.2 | 1593.4 |
| 15°   | 1553.0 | 1562.7 | 1559.9 | 1572.5 | 1576.6 |
| 17.5° | 1527.9 | 1539.0 | 1536.3 | 1551.6 | 1555.8 |
| 20°   | 1500.0 | 1509.8 | 1509.8 | 1523.7 | 1532.1 |
| 22.5° | 1466.6 | 1477.8 | 1479.1 | 1494.5 | 1502.8 |
| 25°   | 1430.4 | 1442.9 | 1444.3 | 1463.8 | 1469.4 |
| 27.5° | 1391.4 | 1403.9 | 1409.5 | 1430.4 | 1436.0 |
| 30°   | 1349.6 | 1362.2 | 1369.1 | 1392.8 | 1399.8 |
| 32.5° | 1305.0 | 1320.4 | 1327.3 | 1353.8 | 1360.8 |
| 35°   | 1257.7 | 1274.4 | 1284.2 | 1312.0 | 1321.8 |
| 37.5° | 1208.9 | 1225.7 | 1238.2 | 1267.4 | 1278.6 |
| 40°   | 1157.4 | 1175.5 | 1192.2 | 1221.5 | 1231.2 |
| 42.5° | 1107.3 | 1125.4 | 1140.7 | 1171.3 | 1181.1 |
| 45°   | 1053.0 | 1071.1 | 1089.2 | 1121.2 | 1130.9 |
| 47.5° | 995.8  | 1015.3 | 1036.2 | 1065.5 | 1078.0 |
| 50°   | 938.7  | 958.2  | 980.5  | 1011.2 | 1022.3 |
| 52.5° | 878.9  | 899.7  | 922.0  | 954.1  | 962.4  |
| 55°   | 817.6  | 838.5  | 863.5  | 895.6  | 903.9  |
| 57.5° | 754.9  | 777.2  | 803.6  | 834.3  | 842.6  |
| 60°   | 690.8  | 713.1  | 741.0  | 770.2  | 773.0  |
| 62.5° | 628.1  | 647.6  | 675.5  | 703.4  | 699.2  |
| 65°   | 561.3  | 579.4  | 608.7  | 629.5  | 621.2  |
| 67.5° | 494.4  | 513.9  | 540.4  | 555.7  | 544.6  |
| 70°   | 426.2  | 447.1  | 468.0  | 479.1  | 468.0  |
| 72.5° | 357.9  | 380.2  | 395.6  | 402.5  | 392.8  |
| 75°   | 289.7  | 312.0  | 321.7  | 330.1  | 323.1  |
| 77.5° | 224.2  | 245.1  | 249.3  | 259.1  | 249.3  |
| 80°   | 160.2  | 179.7  | 182.5  | 192.2  | 182.5  |
| 82.5° | 103.1  | 115.6  | 121.2  | 129.5  | 119.8  |
| 85°   | 55.7   | 62.7   | 66.9   | 71.0   | 58.5   |
| 87.5° | 19.5   | 22.3   | 19.5   | 16.7   | 7.0    |
| 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 | 17.63            | 19.28 | 17.99 | 19.59 | 19.90 | 18.17          | 19.82 | 18.54 | 20.13 | 20.45 |
|                 | 3H   | 19.41            | 20.91 | 19.79 | 21.23 | 21.59 | 19.98          | 21.47 | 20.35 | 21.80 | 22.16 |
|                 | 4H   | 20.05            | 21.46 | 20.45 | 21.81 | 22.18 | 20.62          | 22.03 | 21.02 | 22.38 | 22.75 |
|                 | 6H   | 20.48            | 21.78 | 20.89 | 22.15 | 22.54 | 21.06          | 22.37 | 21.47 | 22.73 | 23.12 |
|                 | 8H   | 20.59            | 21.83 | 21.01 | 22.22 | 22.62 | 21.19          | 22.43 | 21.61 | 22.82 | 23.22 |
|                 | 12H  | 20.64            | 21.84 | 21.07 | 22.22 | 22.65 | 21.24          | 22.44 | 21.67 | 22.82 | 23.25 |
| 4H              | 2H   | 18.35            | 19.76 | 18.75 | 20.11 | 20.48 | 18.78          | 20.19 | 19.18 | 20.53 | 20.91 |
|                 | 3H   | 20.36            | 21.54 | 20.77 | 21.94 | 22.34 | 20.81          | 22.00 | 21.22 | 22.39 | 22.79 |
|                 | 4H   | 21.13            | 22.20 | 21.56 | 22.61 | 23.04 | 21.59          | 22.66 | 22.03 | 23.08 | 23.51 |
|                 | 6H   | 21.67            | 22.61 | 22.13 | 23.05 | 23.50 | 22.16          | 23.10 | 22.62 | 23.54 | 23.99 |
|                 | 8H   | 21.82            | 22.69 | 22.28 | 23.13 | 23.60 | 22.33          | 23.20 | 22.79 | 23.64 | 24.11 |
|                 | 12H  | 21.90            | 22.69 | 22.38 | 23.16 | 23.63 | 22.42          | 23.21 | 22.90 | 23.68 | 24.15 |
| 8H              | 4H   | 21.47            | 22.34 | 21.93 | 22.79 | 23.25 | 21.88          | 22.76 | 22.34 | 23.20 | 23.66 |
|                 | 6H   | 22.13            | 22.86 | 22.62 | 23.34 | 23.82 | 22.57          | 23.29 | 23.06 | 23.78 | 24.25 |
|                 | 8H   | 22.34            | 22.99 | 22.84 | 23.49 | 23.98 | 22.80          | 23.45 | 23.31 | 23.95 | 24.44 |
|                 | 12H  | 22.47            | 23.05 | 22.98 | 23.54 | 24.10 | 22.95          | 23.52 | 23.45 | 24.01 | 24.57 |
| 12H             | 4H   | 21.51            | 22.29 | 21.99 | 22.77 | 23.24 | 21.91          | 22.69 | 22.39 | 23.17 | 23.64 |
|                 | 6H   | 22.19            | 22.84 | 22.69 | 23.34 | 23.83 | 22.61          | 23.26 | 23.11 | 23.76 | 24.25 |
|                 | 8H   | 22.44            | 23.02 | 22.95 | 23.51 | 24.07 | 22.89          | 23.47 | 23.40 | 23.96 | 24.52 |