

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: P1586657

Luminaire Tested: 22CZSP-A-43HE-L840

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586657  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-668-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 22CZSP-A-43HE-L840  
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 80CRI, Ribbed Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

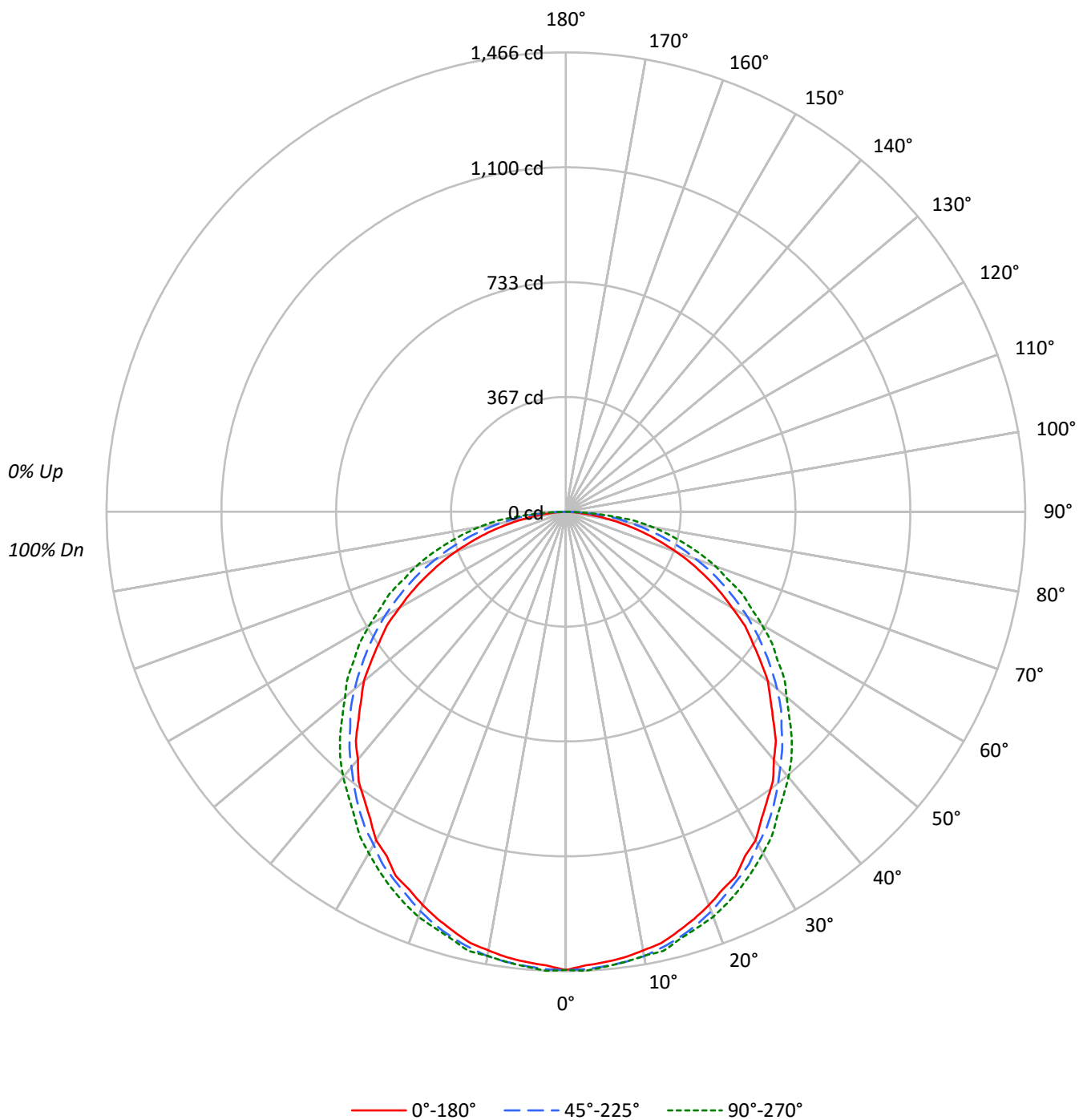
Lumens per Lamp: N/A  
Luminaire Lumens: 4307.0 lumens  
Efficiency: N/A  
Efficacy: 152.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.2  
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  |     |     | 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   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 87  |  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 82  | 76  | 95  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  | 74  | 70  | 68  |
| 3   | 89  | 78  | 70  | 63  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 60  |  | 68  | 64  | 59  | 57  |
| 4   | 82  | 69  | 60  | 53  | 79  | 68  | 59  | 53  | 65  | 58  | 52  |  | 63  | 57  | 51  |  | 61  | 55  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 58  | 51  | 45  |  | 56  | 50  | 44  |  | 55  | 49  | 44  | 42  |
| 6   | 69  | 56  | 46  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  |  | 51  | 44  | 39  |  | 49  | 43  | 39  | 36  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 35  |  | 46  | 40  | 34  |  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  |  | 43  | 36  | 31  |  | 41  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 25  | 51  | 38  | 31  | 25  | 37  | 30  | 25  |  | 36  | 30  | 25  |  | 35  | 29  | 25  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4579 | 4579 | 4579 |
| 5°  | 4534 | 4576 | 4580 |
| 10° | 4520 | 4578 | 4574 |
| 15° | 4493 | 4557 | 4574 |
| 20° | 4451 | 4522 | 4583 |
| 25° | 4433 | 4479 | 4570 |
| 30° | 4378 | 4435 | 4549 |
| 35° | 4286 | 4406 | 4507 |
| 40° | 4222 | 4351 | 4518 |
| 45° | 4142 | 4311 | 4515 |
| 50° | 4101 | 4287 | 4479 |
| 55° | 3970 | 4229 | 4502 |
| 60° | 3837 | 4183 | 4529 |
| 65° | 3670 | 4119 | 4607 |
| 70° | 3450 | 4040 | 4656 |
| 75° | 3108 | 3968 | 4750 |
| 80° | 2543 | 3895 | 5060 |
| 85° | 1656 | 3880 | 4732 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5309 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 138.2  | 3.2       |
| 10°-20°   | 395.8  | 9.2       |
| 20°-30°   | 598.2  | 13.9      |
| 30°-40°   | 721.4  | 16.8      |
| 40°-50°   | 754.2  | 17.5      |
| 50°-60°   | 695.5  | 16.1      |
| 60°-70°   | 551.1  | 12.8      |
| 70°-80°   | 344.6  | 8.0       |
| 80°-90°   | 108.1  | 2.5       |
| 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°    | 1132.2 | 26.3      |
| 0°-40°    | 1853.6 | 43.0      |
| 0°-60°    | 3303.3 | 76.7      |
| 0°-90°    | 4307.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4307.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1462 | 1462  | 1462 | 1462  | 1462 |      |
| 5°  | 1442 | 1449  | 1456 | 1461  | 1457 | 137  |
| 15° | 1386 | 1392  | 1406 | 1415  | 1411 | 391  |
| 25° | 1283 | 1279  | 1296 | 1315  | 1323 | 588  |
| 35° | 1121 | 1134  | 1153 | 1172  | 1179 | 703  |
| 45° | 935  | 948   | 974  | 999   | 1020 | 724  |
| 55° | 727  | 744   | 775  | 817   | 825  | 652  |
| 65° | 495  | 516   | 556  | 599   | 622  | 491  |
| 75° | 257  | 278   | 328  | 374   | 393  | 271  |
| 85° | 46   | 66    | 108  | 126   | 132  | 60   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1462.3 | 1462.3 | 1462.3 | 1462.3 | 1462.3 |
| 2.5°  | 1449.1 | 1455.7 | 1460.9 | 1459.6 | 1466.2 |
| 5°    | 1442.5 | 1449.1 | 1455.7 | 1460.9 | 1457.0 |
| 7.5°  | 1434.6 | 1441.2 | 1449.1 | 1457.0 | 1449.1 |
| 10°   | 1421.4 | 1425.4 | 1439.9 | 1441.2 | 1438.6 |
| 12.5° | 1409.6 | 1413.5 | 1424.1 | 1433.3 | 1435.9 |
| 15°   | 1385.9 | 1392.4 | 1405.6 | 1414.8 | 1410.9 |
| 17.5° | 1362.1 | 1371.4 | 1383.2 | 1392.4 | 1392.4 |
| 20°   | 1335.8 | 1342.4 | 1356.9 | 1363.5 | 1375.3 |
| 22.5° | 1305.5 | 1313.4 | 1325.3 | 1343.7 | 1350.3 |
| 25°   | 1283.1 | 1279.2 | 1296.3 | 1314.7 | 1322.6 |
| 27.5° | 1238.3 | 1243.6 | 1267.3 | 1284.4 | 1291.0 |
| 30°   | 1210.7 | 1213.3 | 1226.5 | 1250.2 | 1258.1 |
| 32.5° | 1161.9 | 1169.8 | 1193.5 | 1210.7 | 1225.1 |
| 35°   | 1121.1 | 1134.2 | 1152.7 | 1172.4 | 1179.0 |
| 37.5° | 1085.5 | 1088.1 | 1109.2 | 1135.6 | 1140.8 |
| 40°   | 1032.8 | 1048.6 | 1064.4 | 1097.4 | 1105.3 |
| 42.5° | 992.0  | 999.9  | 1022.3 | 1053.9 | 1065.7 |
| 45°   | 935.3  | 948.5  | 973.5  | 998.6  | 1019.6 |
| 47.5° | 885.3  | 898.4  | 931.4  | 963.0  | 966.9  |
| 50°   | 841.8  | 847.1  | 880.0  | 915.6  | 919.5  |
| 52.5° | 782.5  | 795.7  | 827.3  | 866.8  | 880.0  |
| 55°   | 727.2  | 744.3  | 774.6  | 816.8  | 824.7  |
| 57.5° | 678.4  | 686.3  | 721.9  | 764.1  | 779.9  |
| 60°   | 612.6  | 635.0  | 667.9  | 708.7  | 723.2  |
| 62.5° | 555.9  | 577.0  | 612.6  | 650.8  | 666.6  |
| 65°   | 495.3  | 516.4  | 555.9  | 599.4  | 621.8  |
| 67.5° | 437.4  | 454.5  | 501.9  | 546.7  | 557.2  |
| 70°   | 376.8  | 396.5  | 441.3  | 487.4  | 508.5  |
| 72.5° | 313.5  | 335.9  | 386.0  | 429.5  | 451.9  |
| 75°   | 256.9  | 278.0  | 328.0  | 374.1  | 392.6  |
| 77.5° | 197.6  | 221.3  | 270.1  | 316.2  | 337.2  |
| 80°   | 141.0  | 164.7  | 216.0  | 262.2  | 280.6  |
| 82.5° | 90.9   | 115.9  | 164.7  | 205.5  | 221.3  |
| 85°   | 46.1   | 65.9   | 108.0  | 126.5  | 131.7  |
| 87.5° | 14.5   | 23.7   | 36.9   | 42.2   | 42.2   |
| 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 | 16.81            | 18.48 | 17.18 | 18.79 | 19.11 | 17.60          | 19.27 | 17.97 | 19.58 | 19.90 |
|                 | 3H   | 18.59            | 20.11 | 18.97 | 20.43 | 20.79 | 19.74          | 21.26 | 20.12 | 21.58 | 21.94 |
|                 | 4H   | 19.23            | 20.66 | 19.63 | 21.00 | 21.38 | 20.67          | 22.10 | 21.07 | 22.44 | 22.82 |
|                 | 6H   | 19.66            | 20.98 | 20.07 | 21.35 | 21.74 | 21.49          | 22.82 | 21.90 | 23.18 | 23.57 |
|                 | 8H   | 19.77            | 21.04 | 20.19 | 21.43 | 21.82 | 21.84          | 23.11 | 22.26 | 23.50 | 23.89 |
|                 | 12H  | 19.82            | 21.04 | 20.25 | 21.42 | 21.85 | 22.08          | 23.30 | 22.51 | 23.68 | 24.11 |
| 4H              | 2H   | 17.58            | 19.01 | 17.98 | 19.36 | 19.73 | 18.20          | 19.62 | 18.59 | 19.97 | 20.35 |
|                 | 3H   | 19.59            | 20.80 | 20.00 | 21.19 | 21.59 | 20.58          | 21.79 | 20.99 | 22.18 | 22.58 |
|                 | 4H   | 20.35            | 21.45 | 20.79 | 21.86 | 22.29 | 21.67          | 22.76 | 22.10 | 23.17 | 23.61 |
|                 | 6H   | 20.90            | 21.86 | 21.35 | 22.30 | 22.75 | 22.67          | 23.63 | 23.12 | 24.07 | 24.52 |
|                 | 8H   | 21.06            | 21.95 | 21.52 | 22.40 | 22.86 | 23.09          | 23.99 | 23.55 | 24.43 | 24.90 |
|                 | 12H  | 21.15            | 21.95 | 21.62 | 22.43 | 22.90 | 23.41          | 24.22 | 23.89 | 24.69 | 25.16 |
| 8H              | 4H   | 20.83            | 21.73 | 21.29 | 22.17 | 22.64 | 21.98          | 22.88 | 22.44 | 23.32 | 23.78 |
|                 | 6H   | 21.52            | 22.27 | 22.02 | 22.76 | 23.23 | 23.14          | 23.89 | 23.63 | 24.38 | 24.85 |
|                 | 8H   | 21.75            | 22.43 | 22.26 | 22.93 | 23.41 | 23.69          | 24.36 | 24.19 | 24.86 | 25.35 |
|                 | 12H  | 21.90            | 22.50 | 22.40 | 22.99 | 23.54 | 24.12          | 24.71 | 24.62 | 25.20 | 25.76 |
| 12H             | 4H   | 20.93            | 21.74 | 21.41 | 22.21 | 22.68 | 22.01          | 22.82 | 22.48 | 23.29 | 23.76 |
|                 | 6H   | 21.67            | 22.35 | 22.18 | 22.85 | 23.34 | 23.20          | 23.87 | 23.71 | 24.38 | 24.86 |
|                 | 8H   | 21.98            | 22.57 | 22.48 | 23.06 | 23.62 | 23.82          | 24.41 | 24.32 | 24.90 | 25.46 |