

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: P1586690

Luminaire Tested: 22CZSP-A-47-L950-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586690  
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-A-47-L950-S  
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 90CRI, Smooth Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

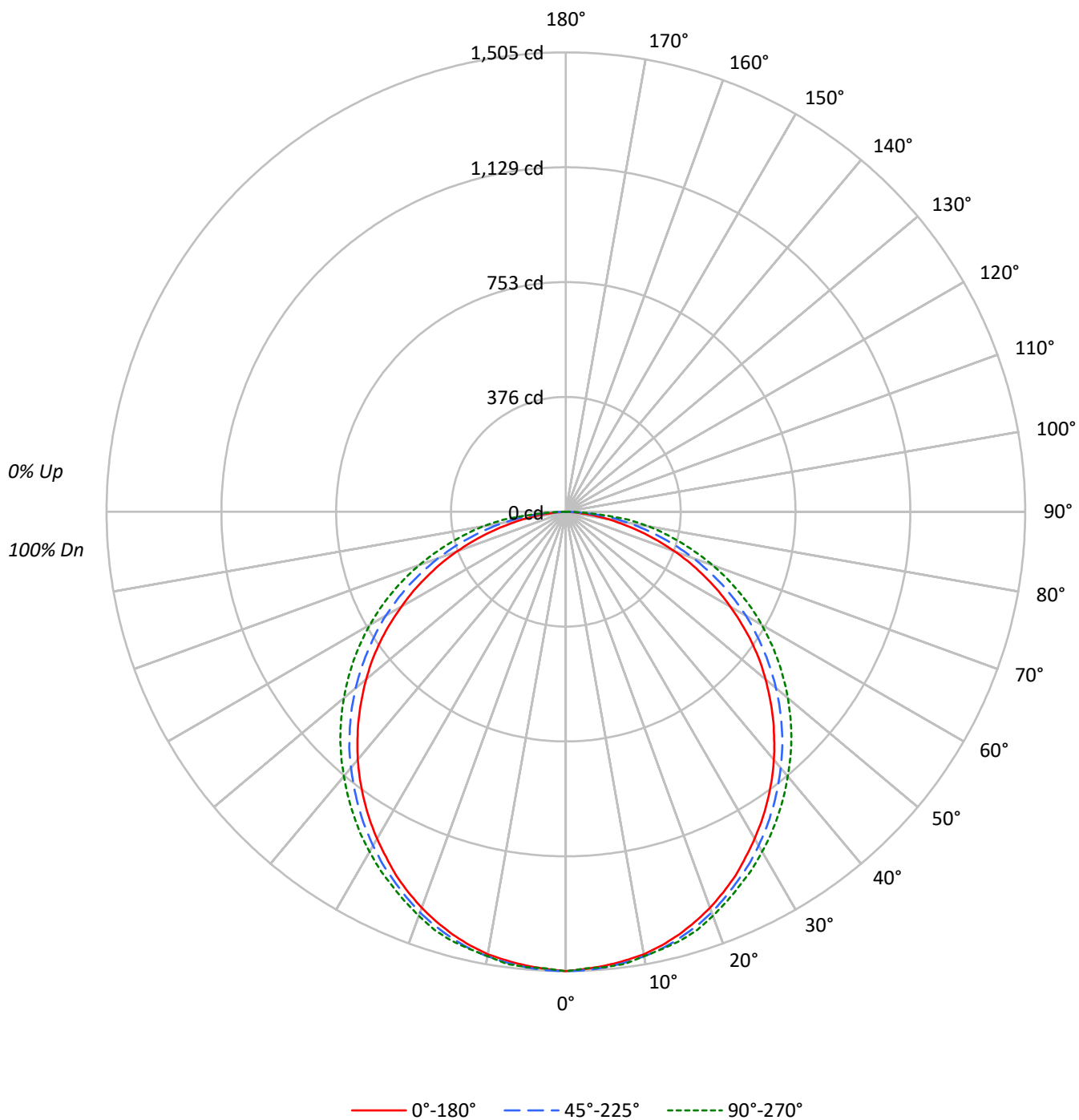
Lumens per Lamp: N/A  
Luminaire Lumens: 4394.0 lumens  
Efficiency: N/A  
Efficacy: 132.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.1  
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  | 106 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 88  |  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  | 74  | 71  | 69  |
| 3   | 89  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 61  |  | 69  | 64  | 60  | 57  |
| 4   | 82  | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 52  |  | 63  | 57  | 52  |  | 61  | 56  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  |  | 57  | 50  | 45  |  | 55  | 49  | 44  | 42  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  |  | 51  | 44  | 39  |  | 50  | 44  | 39  | 37  |
| 7   | 64  | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  |  | 47  | 40  | 35  |  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  |  | 37  | 30  | 25  |  | 36  | 30  | 25  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4713 | 4713 | 4713 |
| 5°  | 4691 | 4710 | 4706 |
| 10° | 4681 | 4703 | 4700 |
| 15° | 4648 | 4685 | 4714 |
| 20° | 4601 | 4656 | 4694 |
| 25° | 4544 | 4607 | 4664 |
| 30° | 4473 | 4567 | 4651 |
| 35° | 4408 | 4522 | 4636 |
| 40° | 4335 | 4477 | 4623 |
| 45° | 4253 | 4432 | 4629 |
| 50° | 4162 | 4378 | 4626 |
| 55° | 4053 | 4316 | 4632 |
| 60° | 3901 | 4269 | 4643 |
| 65° | 3722 | 4186 | 4658 |
| 70° | 3469 | 4070 | 4678 |
| 75° | 3091 | 3908 | 4724 |
| 80° | 2555 | 3720 | 4955 |
| 85° | 1663 | 3359 | 4329 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5112 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 142.3  | 3.2       |
| 10°-20°   | 407.6  | 9.3       |
| 20°-30°   | 614.7  | 14.0      |
| 30°-40°   | 740.4  | 16.8      |
| 40°-50°   | 773.2  | 17.6      |
| 50°-60°   | 710.1  | 16.2      |
| 60°-70°   | 559.3  | 12.7      |
| 70°-80°   | 343.1  | 7.8       |
| 80°-90°   | 103.3  | 2.3       |
| 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°    | 1164.6 | 26.5      |
| 0°-40°    | 1905.0 | 43.4      |
| 0°-60°    | 3388.3 | 77.1      |
| 0°-90°    | 4394.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4394.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1505 | 1505  | 1505 | 1505  | 1505 |      |
| 5°  | 1492 | 1494  | 1498 | 1503  | 1497 | 142  |
| 15° | 1434 | 1437  | 1445 | 1454  | 1454 | 404  |
| 25° | 1315 | 1318  | 1333 | 1350  | 1350 | 605  |
| 35° | 1153 | 1159  | 1183 | 1207  | 1213 | 721  |
| 45° | 960  | 971   | 1001 | 1036  | 1045 | 740  |
| 55° | 742  | 756   | 791  | 835   | 848  | 663  |
| 65° | 502  | 520   | 565  | 612   | 629  | 497  |
| 75° | 256  | 276   | 323  | 374   | 390  | 271  |
| 85° | 46   | 64    | 94   | 119   | 120  | 60   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1505.1 | 1505.1 | 1505.1 | 1505.1 | 1505.1 |
| 2.5°  | 1499.3 | 1502.2 | 1503.1 | 1504.1 | 1497.3 |
| 5°    | 1492.5 | 1494.5 | 1498.3 | 1503.1 | 1497.3 |
| 7.5°  | 1482.9 | 1484.8 | 1489.6 | 1496.4 | 1493.5 |
| 10°   | 1472.3 | 1473.2 | 1479.0 | 1483.9 | 1478.1 |
| 12.5° | 1454.9 | 1457.8 | 1464.6 | 1468.4 | 1466.5 |
| 15°   | 1433.7 | 1436.6 | 1445.3 | 1454.0 | 1454.0 |
| 17.5° | 1408.6 | 1412.5 | 1423.1 | 1434.7 | 1435.6 |
| 20°   | 1380.7 | 1383.6 | 1397.1 | 1408.6 | 1408.6 |
| 22.5° | 1348.9 | 1352.7 | 1366.2 | 1378.8 | 1380.7 |
| 25°   | 1315.1 | 1318.0 | 1333.4 | 1349.8 | 1349.8 |
| 27.5° | 1275.6 | 1281.4 | 1300.7 | 1317.1 | 1320.9 |
| 30°   | 1237.0 | 1241.8 | 1263.1 | 1283.3 | 1286.2 |
| 32.5° | 1196.5 | 1202.3 | 1224.5 | 1246.7 | 1251.5 |
| 35°   | 1153.1 | 1158.9 | 1183.0 | 1207.1 | 1212.9 |
| 37.5° | 1107.8 | 1114.6 | 1139.6 | 1167.6 | 1173.4 |
| 40°   | 1060.6 | 1068.3 | 1095.3 | 1125.2 | 1131.0 |
| 42.5° | 1010.4 | 1021.1 | 1050.0 | 1080.8 | 1089.5 |
| 45°   | 960.3  | 970.9  | 1000.8 | 1035.5 | 1045.2 |
| 47.5° | 907.3  | 919.8  | 950.7  | 987.3  | 997.9  |
| 50°   | 854.3  | 866.8  | 898.6  | 938.1  | 949.7  |
| 52.5° | 800.3  | 812.8  | 845.6  | 887.0  | 899.6  |
| 55°   | 742.4  | 755.9  | 790.6  | 835.0  | 848.5  |
| 57.5° | 682.6  | 700.0  | 736.6  | 781.9  | 795.4  |
| 60°   | 622.9  | 640.2  | 681.7  | 726.0  | 741.4  |
| 62.5° | 564.0  | 580.4  | 622.9  | 670.1  | 686.5  |
| 65°   | 502.3  | 519.7  | 565.0  | 612.2  | 628.6  |
| 67.5° | 441.6  | 458.9  | 504.3  | 553.4  | 570.8  |
| 70°   | 378.9  | 398.2  | 444.5  | 493.7  | 511.0  |
| 72.5° | 316.2  | 336.5  | 383.7  | 433.9  | 450.3  |
| 75°   | 255.5  | 275.8  | 323.0  | 374.1  | 390.5  |
| 77.5° | 195.7  | 217.9  | 264.2  | 316.2  | 331.7  |
| 80°   | 141.7  | 162.9  | 206.3  | 257.4  | 274.8  |
| 82.5° | 90.6   | 109.0  | 152.3  | 200.5  | 213.1  |
| 85°   | 46.3   | 63.6   | 93.5   | 118.6  | 120.5  |
| 87.5° | 14.5   | 20.2   | 30.9   | 46.3   | 47.2   |
| 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 | 16.86            | 18.53 | 17.23 | 18.84 | 19.15 | 17.69          | 19.36 | 18.06 | 19.67 | 19.98 |
|                 | 3H   | 18.62            | 20.13 | 19.00 | 20.45 | 20.81 | 19.81          | 21.32 | 20.19 | 21.64 | 22.00 |
|                 | 4H   | 19.24            | 20.66 | 19.64 | 21.01 | 21.38 | 20.70          | 22.12 | 21.10 | 22.47 | 22.84 |
|                 | 6H   | 19.65            | 20.97 | 20.06 | 21.33 | 21.72 | 21.48          | 22.80 | 21.89 | 23.17 | 23.56 |
|                 | 8H   | 19.76            | 21.02 | 20.18 | 21.41 | 21.81 | 21.80          | 23.06 | 22.22 | 23.45 | 23.85 |
|                 | 12H  | 19.81            | 21.02 | 20.24 | 21.40 | 21.83 | 22.01          | 23.22 | 22.44 | 23.60 | 24.03 |
| 4H              | 2H   | 17.64            | 19.06 | 18.03 | 19.41 | 19.78 | 18.28          | 19.70 | 18.68 | 20.05 | 20.43 |
|                 | 3H   | 19.61            | 20.81 | 20.02 | 21.21 | 21.61 | 20.64          | 21.84 | 21.05 | 22.23 | 22.63 |
|                 | 4H   | 20.35            | 21.44 | 20.78 | 21.85 | 22.28 | 21.69          | 22.78 | 22.12 | 23.19 | 23.62 |
|                 | 6H   | 20.88            | 21.83 | 21.33 | 22.27 | 22.72 | 22.64          | 23.59 | 23.09 | 24.03 | 24.49 |
|                 | 8H   | 21.02            | 21.92 | 21.48 | 22.36 | 22.82 | 23.04          | 23.93 | 23.50 | 24.37 | 24.84 |
|                 | 12H  | 21.11            | 21.91 | 21.59 | 22.39 | 22.85 | 23.32          | 24.12 | 23.79 | 24.59 | 25.06 |
| 8H              | 4H   | 20.81            | 21.70 | 21.27 | 22.14 | 22.61 | 21.98          | 22.87 | 22.44 | 23.31 | 23.78 |
|                 | 6H   | 21.47            | 22.21 | 21.96 | 22.70 | 23.17 | 23.09          | 23.83 | 23.58 | 24.32 | 24.80 |
|                 | 8H   | 21.68            | 22.35 | 22.19 | 22.85 | 23.34 | 23.60          | 24.27 | 24.11 | 24.78 | 25.26 |
|                 | 12H  | 21.82            | 22.41 | 22.33 | 22.90 | 23.46 | 23.99          | 24.58 | 24.49 | 25.07 | 25.63 |
| 12H             | 4H   | 20.90            | 21.70 | 21.38 | 22.18 | 22.64 | 22.00          | 22.81 | 22.48 | 23.28 | 23.75 |
|                 | 6H   | 21.60            | 22.27 | 22.11 | 22.78 | 23.26 | 23.14          | 23.81 | 23.64 | 24.31 | 24.80 |
|                 | 8H   | 21.88            | 22.47 | 22.39 | 22.96 | 23.52 | 23.72          | 24.31 | 24.22 | 24.80 | 25.36 |