

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: P1586649

Luminaire Tested: 22CZSP-A-42-L945

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586649  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-772-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 22CZSP-A-42-L945  
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 90CRI, Ribbed Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

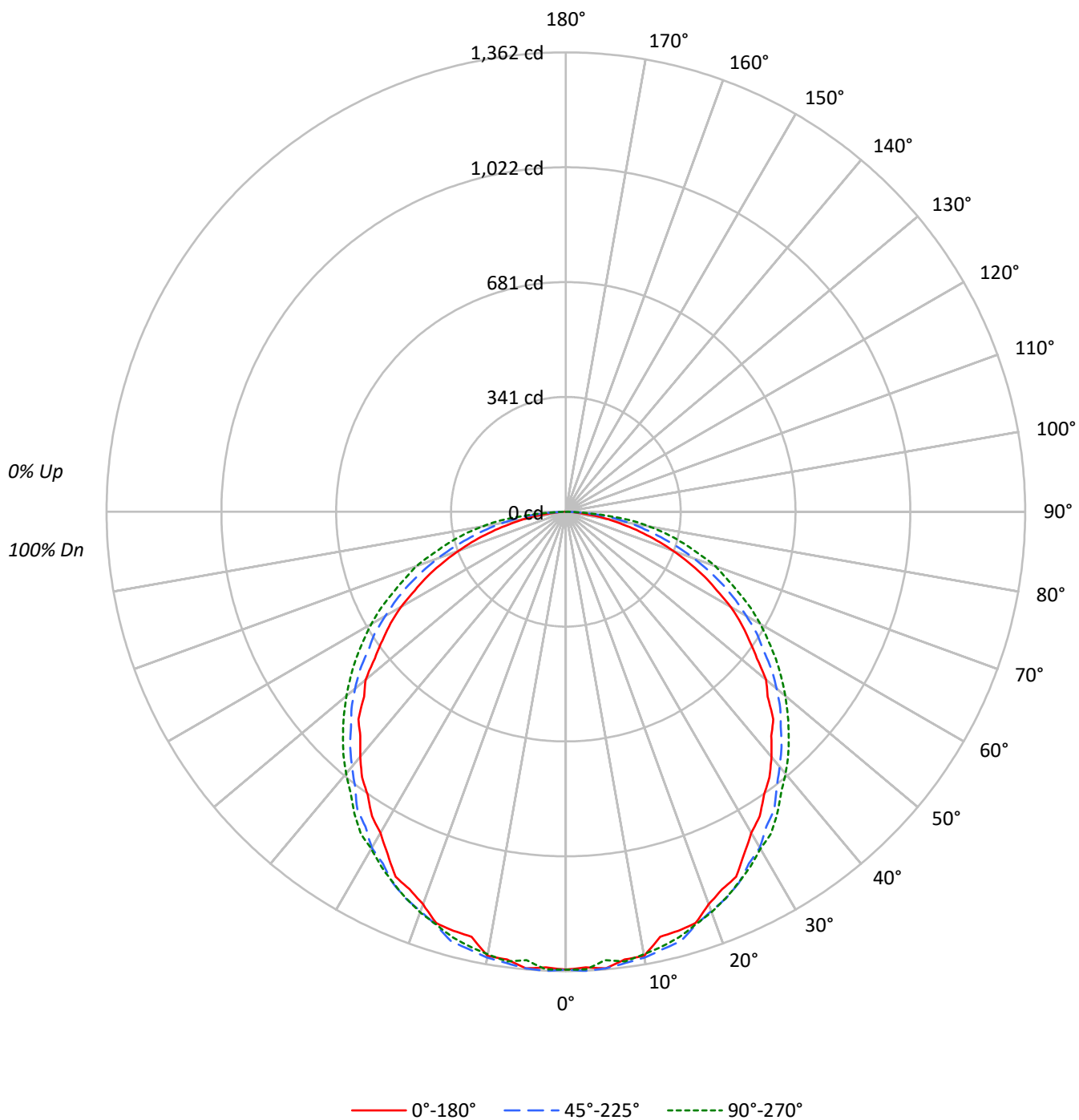
Lumens per Lamp: N/A  
Luminaire Lumens: 3963.0 lumens  
Efficiency: N/A  
Efficacy: 137.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.9  
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  |     |     | 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  | 68  |
| 3   | 89  | 79  | 70  | 63  | 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  | 31  | 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°  | 4250 | 4250 | 4250 |
| 5°  | 4272 | 4272 | 4195 |
| 10° | 4251 | 4267 | 4235 |
| 15° | 4170 | 4271 | 4230 |
| 20° | 4126 | 4199 | 4210 |
| 25° | 4126 | 4196 | 4190 |
| 30° | 3976 | 4159 | 4171 |
| 35° | 3916 | 4119 | 4177 |
| 40° | 3876 | 4032 | 4142 |
| 45° | 3851 | 3990 | 4139 |
| 50° | 3775 | 3973 | 4138 |
| 55° | 3622 | 3899 | 4148 |
| 60° | 3536 | 3869 | 4171 |
| 65° | 3356 | 3814 | 4183 |
| 70° | 3095 | 3691 | 4325 |
| 75° | 2750 | 3528 | 4366 |
| 80° | 2287 | 3460 | 4526 |
| 85° | 1398 | 3097 | 3826 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4683 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 128.7  | 3.2       |
| 10°-20°   | 367.8  | 9.3       |
| 20°-30°   | 554.8  | 14.0      |
| 30°-40°   | 666.3  | 16.8      |
| 40°-50°   | 695.5  | 17.6      |
| 50°-60°   | 640.4  | 16.2      |
| 60°-70°   | 505.7  | 12.8      |
| 70°-80°   | 311.4  | 7.9       |
| 80°-90°   | 92.3   | 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°    | 1051.3 | 26.5      |
| 0°-40°    | 1717.6 | 43.3      |
| 0°-60°    | 3053.5 | 77.1      |
| 0°-90°    | 3963.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3963.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1357 | 1357  | 1357 | 1357  | 1357 |      |
| 5°  | 1359 | 1346  | 1359 | 1361  | 1334 | 128  |
| 15° | 1286 | 1304  | 1318 | 1312  | 1305 | 363  |
| 25° | 1194 | 1203  | 1214 | 1209  | 1213 | 544  |
| 35° | 1024 | 1043  | 1078 | 1083  | 1093 | 644  |
| 45° | 870  | 876   | 901  | 920   | 935  | 665  |
| 55° | 664  | 681   | 714  | 746   | 760  | 596  |
| 65° | 453  | 469   | 515  | 552   | 565  | 446  |
| 75° | 227  | 249   | 292  | 338   | 361  | 241  |
| 85° | 39   | 56    | 86   | 102   | 106  | 52   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1357.3 | 1357.3 | 1357.3 | 1357.3 | 1357.3 |
| 2.5°  | 1352.3 | 1366.6 | 1362.4 | 1364.9 | 1358.2 |
| 5°    | 1359.0 | 1345.5 | 1359.0 | 1360.7 | 1334.5 |
| 7.5°  | 1338.7 | 1340.4 | 1349.7 | 1352.3 | 1344.6 |
| 10°   | 1337.0 | 1342.1 | 1342.1 | 1333.7 | 1332.0 |
| 12.5° | 1290.6 | 1315.9 | 1328.6 | 1334.5 | 1320.1 |
| 15°   | 1286.3 | 1304.1 | 1317.6 | 1311.7 | 1304.9 |
| 17.5° | 1278.7 | 1273.7 | 1283.0 | 1289.7 | 1282.1 |
| 20°   | 1238.2 | 1246.6 | 1260.1 | 1261.8 | 1263.5 |
| 22.5° | 1211.1 | 1213.6 | 1240.7 | 1243.2 | 1239.8 |
| 25°   | 1194.2 | 1202.7 | 1214.5 | 1209.4 | 1212.8 |
| 27.5° | 1144.3 | 1164.6 | 1175.6 | 1185.8 | 1185.8 |
| 30°   | 1099.6 | 1123.2 | 1150.3 | 1153.6 | 1153.6 |
| 32.5° | 1070.0 | 1086.0 | 1106.3 | 1113.1 | 1131.7 |
| 35°   | 1024.3 | 1042.9 | 1077.6 | 1082.6 | 1092.8 |
| 37.5° | 992.2  | 1010.8 | 1026.9 | 1044.6 | 1048.8 |
| 40°   | 948.3  | 967.7  | 986.3  | 1006.6 | 1013.3 |
| 42.5° | 901.8  | 922.1  | 946.6  | 967.7  | 976.2  |
| 45°   | 869.7  | 876.4  | 900.9  | 920.4  | 934.7  |
| 47.5° | 811.4  | 830.8  | 862.1  | 886.6  | 892.5  |
| 50°   | 775.0  | 782.6  | 815.6  | 848.5  | 849.4  |
| 52.5° | 714.2  | 737.0  | 769.1  | 800.4  | 804.6  |
| 55°   | 663.5  | 681.2  | 714.2  | 746.3  | 759.8  |
| 57.5° | 616.1  | 629.6  | 671.9  | 704.0  | 711.6  |
| 60°   | 564.6  | 578.9  | 617.8  | 655.0  | 666.0  |
| 62.5° | 504.6  | 524.8  | 567.1  | 602.6  | 617.8  |
| 65°   | 453.0  | 469.1  | 514.7  | 551.9  | 564.6  |
| 67.5° | 394.7  | 416.7  | 459.8  | 501.2  | 514.7  |
| 70°   | 338.1  | 360.0  | 403.1  | 446.2  | 472.4  |
| 72.5° | 282.3  | 305.1  | 348.2  | 398.1  | 412.4  |
| 75°   | 227.3  | 249.3  | 291.6  | 338.1  | 360.9  |
| 77.5° | 173.3  | 196.9  | 240.0  | 286.5  | 308.5  |
| 80°   | 126.8  | 145.4  | 191.9  | 232.4  | 251.0  |
| 82.5° | 78.6   | 98.0   | 141.1  | 179.2  | 195.2  |
| 85°   | 38.9   | 55.8   | 86.2   | 102.3  | 106.5  |
| 87.5° | 11.8   | 17.7   | 27.0   | 35.5   | 40.6   |
| 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 | 16.49            | 18.16 | 16.86 | 18.47 | 18.78 | 17.32          | 18.98 | 17.68 | 19.29 | 19.61 |
|                 | 3H   | 18.25            | 19.76 | 18.62 | 20.08 | 20.44 | 19.46          | 20.97 | 19.84 | 21.30 | 21.66 |
|                 | 4H   | 18.86            | 20.28 | 19.26 | 20.63 | 21.01 | 20.38          | 21.80 | 20.78 | 22.15 | 22.52 |
|                 | 6H   | 19.26            | 20.59 | 19.67 | 20.95 | 21.34 | 21.18          | 22.50 | 21.59 | 22.86 | 23.25 |
|                 | 8H   | 19.37            | 20.63 | 19.79 | 21.02 | 21.42 | 21.50          | 22.76 | 21.92 | 23.15 | 23.55 |
|                 | 12H  | 19.41            | 20.62 | 19.84 | 21.00 | 21.43 | 21.71          | 22.92 | 22.14 | 23.30 | 23.73 |
| 4H              | 2H   | 17.28            | 18.71 | 17.68 | 19.05 | 19.43 | 17.92          | 19.34 | 18.32 | 19.69 | 20.07 |
|                 | 3H   | 19.26            | 20.46 | 19.67 | 20.85 | 21.25 | 20.30          | 21.50 | 20.71 | 21.90 | 22.30 |
|                 | 4H   | 19.99            | 21.08 | 20.42 | 21.49 | 21.92 | 21.37          | 22.46 | 21.80 | 22.87 | 23.30 |
|                 | 6H   | 20.51            | 21.46 | 20.96 | 21.90 | 22.36 | 22.34          | 23.29 | 22.79 | 23.73 | 24.18 |
|                 | 8H   | 20.65            | 21.54 | 21.11 | 21.98 | 22.45 | 22.73          | 23.63 | 23.19 | 24.07 | 24.53 |
|                 | 12H  | 20.73            | 21.53 | 21.21 | 22.00 | 22.47 | 23.00          | 23.80 | 23.48 | 24.28 | 24.75 |
| 8H              | 4H   | 20.46            | 21.35 | 20.91 | 21.79 | 22.25 | 21.66          | 22.55 | 22.12 | 22.99 | 23.46 |
|                 | 6H   | 21.11            | 21.86 | 21.60 | 22.34 | 22.82 | 22.78          | 23.53 | 23.28 | 24.01 | 24.49 |
|                 | 8H   | 21.32            | 21.98 | 21.82 | 22.49 | 22.97 | 23.29          | 23.96 | 23.80 | 24.46 | 24.95 |
|                 | 12H  | 21.45            | 22.04 | 21.95 | 22.53 | 23.09 | 23.66          | 24.25 | 24.17 | 24.74 | 25.30 |
| 12H             | 4H   | 20.55            | 21.35 | 21.03 | 21.83 | 22.29 | 21.68          | 22.49 | 22.16 | 22.96 | 23.43 |
|                 | 6H   | 21.25            | 21.92 | 21.76 | 22.42 | 22.91 | 22.83          | 23.50 | 23.34 | 24.01 | 24.49 |
|                 | 8H   | 21.52            | 22.11 | 22.03 | 22.60 | 23.16 | 23.41          | 24.00 | 23.91 | 24.49 | 25.05 |