

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: P1586369

Luminaire Tested: 22CZSP-35-L945

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586369  
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-35-L945  
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 90CRI, Ribbed Lens  
Light Source: -  
Ballast/Driver: -

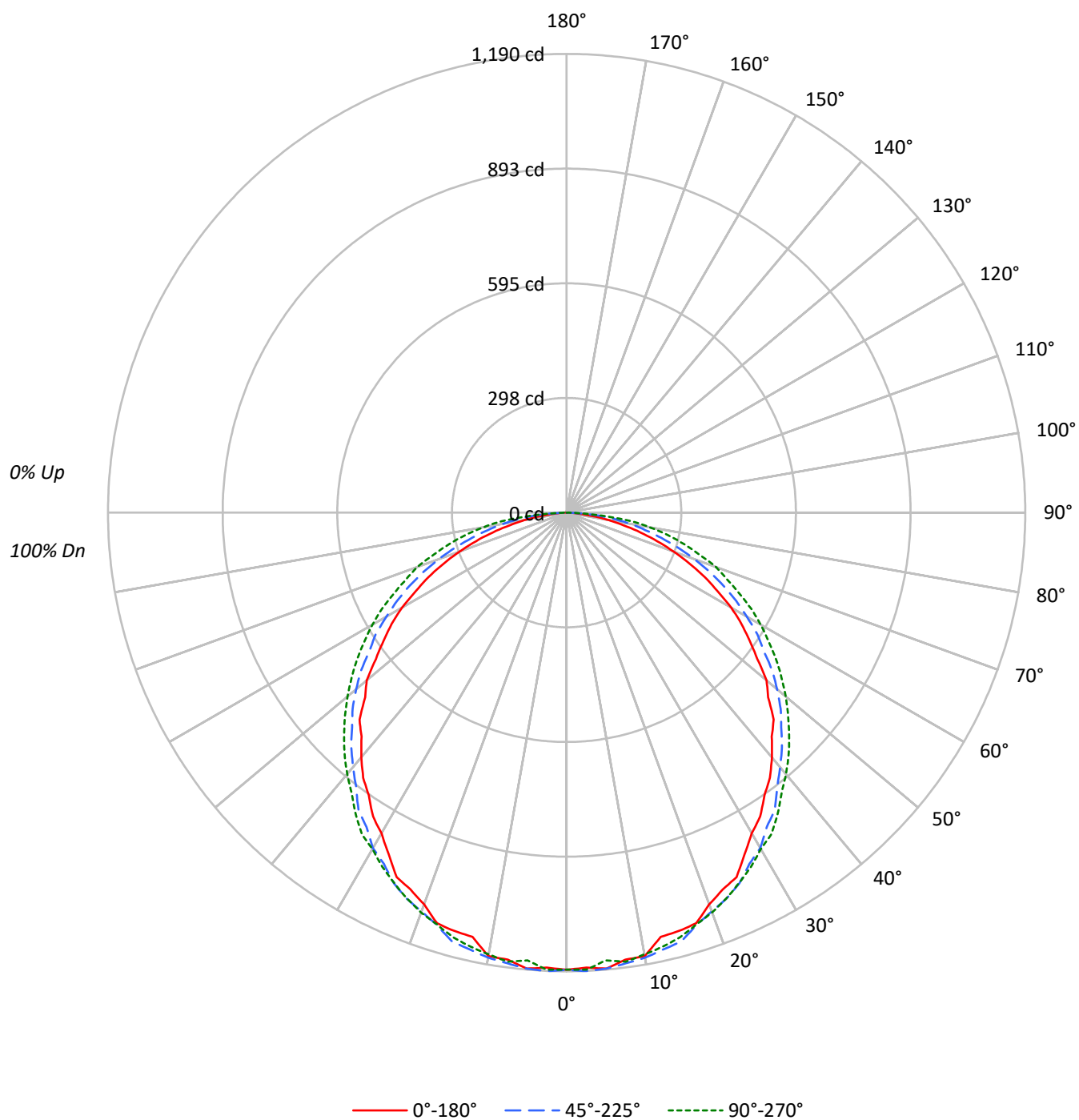
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3462.0 lumens  
Efficiency: N/A  
Efficacy: 140.2 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): 24.7  
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°  | 3713 | 3713 | 3713 |
| 5°  | 3732 | 3732 | 3664 |
| 10° | 3714 | 3728 | 3700 |
| 15° | 3643 | 3731 | 3696 |
| 20° | 3604 | 3668 | 3678 |
| 25° | 3604 | 3666 | 3661 |
| 30° | 3473 | 3633 | 3644 |
| 35° | 3421 | 3599 | 3649 |
| 40° | 3386 | 3522 | 3618 |
| 45° | 3364 | 3485 | 3616 |
| 50° | 3298 | 3471 | 3615 |
| 55° | 3164 | 3406 | 3623 |
| 60° | 3089 | 3380 | 3644 |
| 65° | 2932 | 3331 | 3654 |
| 70° | 2704 | 3225 | 3778 |
| 75° | 2403 | 3081 | 3815 |
| 80° | 1996 | 3022 | 3955 |
| 85° | 1222 | 2705 | 3341 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4093 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 112.4  | 3.2       |
| 10°-20°   | 321.3  | 9.3       |
| 20°-30°   | 484.6  | 14.0      |
| 30°-40°   | 582.1  | 16.8      |
| 40°-50°   | 607.6  | 17.6      |
| 50°-60°   | 559.5  | 16.2      |
| 60°-70°   | 441.8  | 12.8      |
| 70°-80°   | 272.1  | 7.9       |
| 80°-90°   | 80.6   | 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°    | 918.4  | 26.5      |
| 0°-40°    | 1500.4 | 43.3      |
| 0°-60°    | 2667.5 | 77.1      |
| 0°-90°    | 3462.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3462.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1186 | 1186  | 1186 | 1186  | 1186 |      |
| 5°  | 1187 | 1175  | 1187 | 1189  | 1166 | 112  |
| 15° | 1124 | 1139  | 1151 | 1146  | 1140 | 318  |
| 25° | 1043 | 1051  | 1061 | 1056  | 1060 | 475  |
| 35° | 895  | 911   | 941  | 946   | 955  | 562  |
| 45° | 760  | 766   | 787  | 804   | 817  | 581  |
| 55° | 580  | 595   | 624  | 652   | 664  | 520  |
| 65° | 396  | 410   | 450  | 482   | 493  | 390  |
| 75° | 199  | 218   | 255  | 295   | 315  | 211  |
| 85° | 34   | 49    | 75   | 89    | 93   | 46   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1185.7 | 1185.7 | 1185.7 | 1185.7 | 1185.7 |
| 2.5°  | 1181.3 | 1193.9 | 1190.2 | 1192.4 | 1186.5 |
| 5°    | 1187.2 | 1175.4 | 1187.2 | 1188.7 | 1165.8 |
| 7.5°  | 1169.5 | 1171.0 | 1179.1 | 1181.3 | 1174.7 |
| 10°   | 1168.0 | 1172.4 | 1172.4 | 1165.1 | 1163.6 |
| 12.5° | 1127.4 | 1149.6 | 1160.6 | 1165.8 | 1153.2 |
| 15°   | 1123.7 | 1139.2 | 1151.0 | 1145.9 | 1140.0 |
| 17.5° | 1117.1 | 1112.6 | 1120.8 | 1126.7 | 1120.0 |
| 20°   | 1081.6 | 1089.0 | 1100.8 | 1102.3 | 1103.8 |
| 22.5° | 1058.0 | 1060.2 | 1083.8 | 1086.1 | 1083.1 |
| 25°   | 1043.2 | 1050.6 | 1061.0 | 1056.5 | 1059.5 |
| 27.5° | 999.7  | 1017.4 | 1027.0 | 1035.9 | 1035.9 |
| 30°   | 960.5  | 981.2  | 1004.8 | 1007.8 | 1007.8 |
| 32.5° | 934.7  | 948.7  | 966.5  | 972.4  | 988.6  |
| 35°   | 894.8  | 911.1  | 941.4  | 945.8  | 954.6  |
| 37.5° | 866.8  | 883.0  | 897.1  | 912.6  | 916.2  |
| 40°   | 828.4  | 845.4  | 861.6  | 879.3  | 885.2  |
| 42.5° | 787.8  | 805.5  | 826.9  | 845.4  | 852.8  |
| 45°   | 759.7  | 765.6  | 787.0  | 804.0  | 816.6  |
| 47.5° | 708.8  | 725.8  | 753.1  | 774.5  | 779.7  |
| 50°   | 677.0  | 683.7  | 712.5  | 741.3  | 742.0  |
| 52.5° | 623.9  | 643.8  | 671.9  | 699.2  | 702.9  |
| 55°   | 579.6  | 595.1  | 623.9  | 651.9  | 663.7  |
| 57.5° | 538.2  | 550.0  | 587.0  | 615.0  | 621.7  |
| 60°   | 493.2  | 505.7  | 539.7  | 572.2  | 581.8  |
| 62.5° | 440.8  | 458.5  | 495.4  | 526.4  | 539.7  |
| 65°   | 395.7  | 409.8  | 449.6  | 482.1  | 493.2  |
| 67.5° | 344.8  | 364.0  | 401.6  | 437.8  | 449.6  |
| 70°   | 295.3  | 314.5  | 352.2  | 389.8  | 412.7  |
| 72.5° | 246.6  | 266.5  | 304.2  | 347.7  | 360.3  |
| 75°   | 198.6  | 217.8  | 254.7  | 295.3  | 315.3  |
| 77.5° | 151.4  | 172.0  | 209.7  | 250.3  | 269.5  |
| 80°   | 110.7  | 127.0  | 167.6  | 203.0  | 219.3  |
| 82.5° | 68.7   | 85.6   | 123.3  | 156.5  | 170.6  |
| 85°   | 34.0   | 48.7   | 75.3   | 89.3   | 93.0   |
| 87.5° | 10.3   | 15.5   | 23.6   | 31.0   | 35.4   |
| 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 | 16.02            | 17.69 | 16.39 | 18.00 | 18.31 | 16.85          | 18.51 | 17.21 | 18.82 | 19.14 |
|                 | 3H   | 17.78            | 19.29 | 18.15 | 19.61 | 19.97 | 18.99          | 20.50 | 19.37 | 20.83 | 21.19 |
|                 | 4H   | 18.39            | 19.81 | 18.79 | 20.16 | 20.54 | 19.91          | 21.33 | 20.31 | 21.68 | 22.05 |
|                 | 6H   | 18.79            | 20.12 | 19.20 | 20.48 | 20.87 | 20.71          | 22.03 | 21.12 | 22.39 | 22.78 |
|                 | 8H   | 18.90            | 20.16 | 19.32 | 20.55 | 20.95 | 21.03          | 22.29 | 21.46 | 22.68 | 23.08 |
|                 | 12H  | 18.94            | 20.15 | 19.37 | 20.53 | 20.96 | 21.24          | 22.45 | 21.67 | 22.83 | 23.26 |
| 4H              | 2H   | 16.81            | 18.24 | 17.21 | 18.58 | 18.96 | 17.45          | 18.88 | 17.85 | 19.22 | 19.60 |
|                 | 3H   | 18.79            | 19.99 | 19.20 | 20.38 | 20.78 | 19.83          | 21.03 | 20.24 | 21.43 | 21.83 |
|                 | 4H   | 19.52            | 20.61 | 19.95 | 21.02 | 21.45 | 20.90          | 21.99 | 21.33 | 22.40 | 22.83 |
|                 | 6H   | 20.04            | 20.99 | 20.49 | 21.43 | 21.89 | 21.87          | 22.82 | 22.32 | 23.26 | 23.71 |
|                 | 8H   | 20.18            | 21.07 | 20.64 | 21.51 | 21.98 | 22.26          | 23.16 | 22.72 | 23.60 | 24.06 |
|                 | 12H  | 20.26            | 21.06 | 20.74 | 21.53 | 22.00 | 22.53          | 23.34 | 23.01 | 23.81 | 24.28 |
| 8H              | 4H   | 19.99            | 20.88 | 20.44 | 21.32 | 21.78 | 21.19          | 22.08 | 21.65 | 22.52 | 22.99 |
|                 | 6H   | 20.64            | 21.39 | 21.13 | 21.87 | 22.35 | 22.31          | 23.06 | 22.81 | 23.54 | 24.02 |
|                 | 8H   | 20.85            | 21.52 | 21.35 | 22.02 | 22.50 | 22.82          | 23.49 | 23.33 | 23.99 | 24.48 |
|                 | 12H  | 20.98            | 21.57 | 21.48 | 22.06 | 22.62 | 23.19          | 23.78 | 23.70 | 24.27 | 24.83 |
| 12H             | 4H   | 20.08            | 20.88 | 20.56 | 21.36 | 21.82 | 21.21          | 22.02 | 21.69 | 22.49 | 22.96 |
|                 | 6H   | 20.78            | 21.45 | 21.29 | 21.95 | 22.44 | 22.36          | 23.03 | 22.87 | 23.54 | 24.02 |
|                 | 8H   | 21.05            | 21.65 | 21.56 | 22.13 | 22.69 | 22.94          | 23.53 | 23.44 | 24.02 | 24.58 |