

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: P1586617

Luminaire Tested: 22CZSP-A-37HE-L840

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586617  
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-37HE-L840  
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 80CRI, Ribbed Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

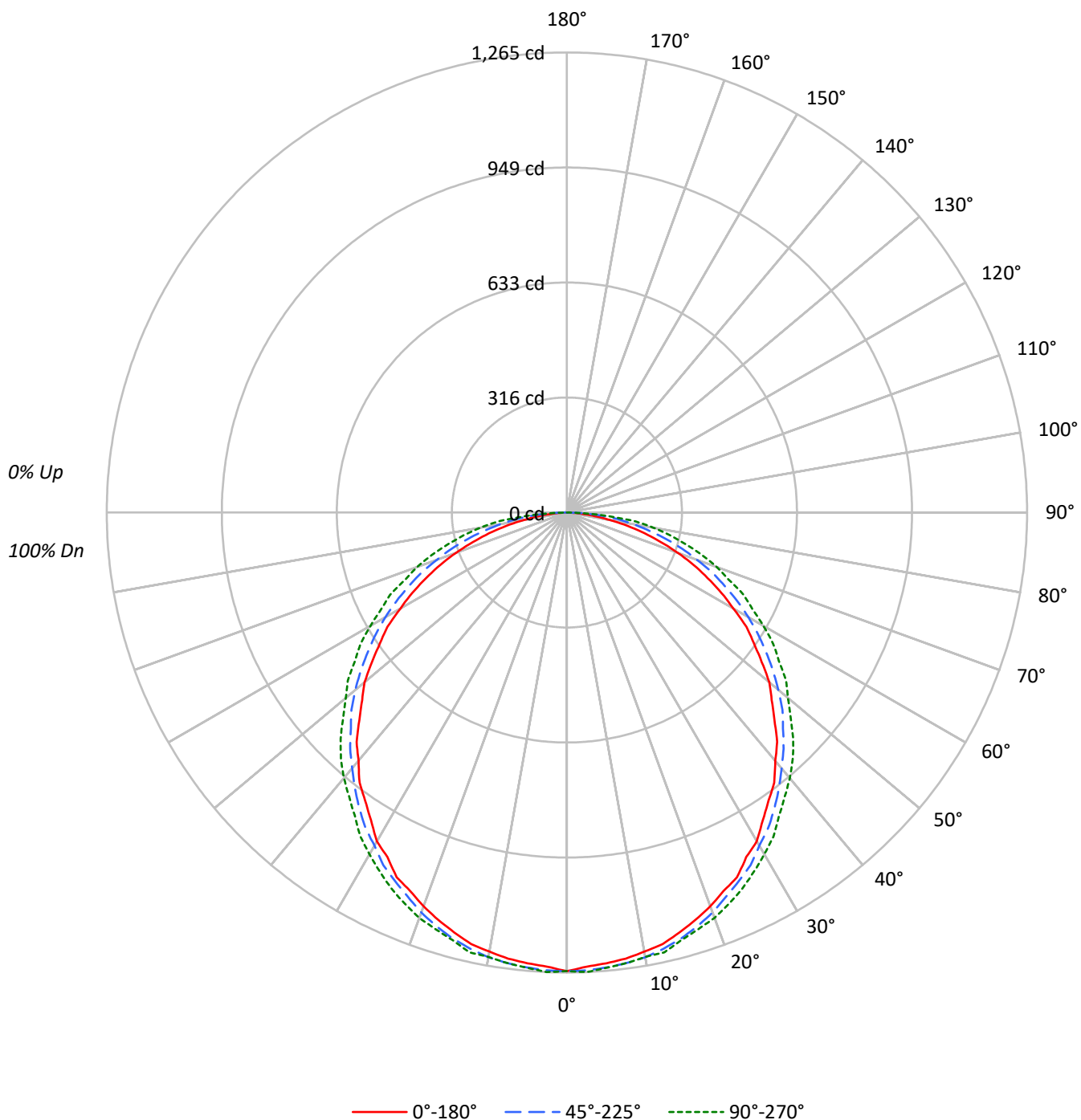
Lumens per Lamp: N/A  
Luminaire Lumens: 3715.0 lumens  
Efficiency: N/A  
Efficacy: 154.1 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 24.1  
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  |
| 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   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 87  |  | 89  |
| 2   | 98  | 90  | 82  | 76  | 95  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  |
| 3   | 89  | 78  | 70  | 63  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 60  |  | 68  |
| 4   | 82  | 69  | 60  | 53  | 79  | 68  | 59  | 53  | 65  | 58  | 52  |  | 63  | 57  | 51  |  | 61  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 58  | 51  | 45  |  | 56  | 50  | 44  |  | 55  |
| 6   | 69  | 56  | 46  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  |  | 51  | 44  | 39  |  | 49  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 35  |  | 46  | 40  | 34  |  | 45  |
| 8   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  |  | 43  | 36  | 31  |  | 41  |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |
| 10  | 52  | 39  | 31  | 25  | 51  | 38  | 31  | 25  | 37  | 30  | 25  |  | 36  | 30  | 25  |  | 35  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3950 | 3950 | 3950 |
| 5°  | 3911 | 3947 | 3950 |
| 10° | 3899 | 3949 | 3945 |
| 15° | 3875 | 3930 | 3945 |
| 20° | 3839 | 3900 | 3953 |
| 25° | 3824 | 3863 | 3942 |
| 30° | 3776 | 3825 | 3924 |
| 35° | 3696 | 3800 | 3888 |
| 40° | 3641 | 3753 | 3897 |
| 45° | 3573 | 3718 | 3895 |
| 50° | 3537 | 3697 | 3864 |
| 55° | 3424 | 3647 | 3883 |
| 60° | 3309 | 3608 | 3907 |
| 65° | 3165 | 3553 | 3974 |
| 70° | 2976 | 3485 | 4016 |
| 75° | 2681 | 3423 | 4097 |
| 80° | 2193 | 3361 | 4364 |
| 85° | 1430 | 3348 | 4081 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4580 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 119.2  | 3.2       |
| 10°-20°   | 341.4  | 9.2       |
| 20°-30°   | 515.9  | 13.9      |
| 30°-40°   | 622.3  | 16.8      |
| 40°-50°   | 650.5  | 17.5      |
| 50°-60°   | 599.9  | 16.1      |
| 60°-70°   | 475.3  | 12.8      |
| 70°-80°   | 297.2  | 8.0       |
| 80°-90°   | 93.2   | 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       |
| <hr/>     |        |           |
| 0°-30°    | 976.5  | 26.3      |
| 0°-40°    | 1598.8 | 43.0      |
| 0°-60°    | 2849.2 | 76.7      |
| 0°-90°    | 3715.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3715.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1261 | 1261  | 1261 | 1261  | 1261 |      |
| 5°  | 1244 | 1250  | 1256 | 1260  | 1257 | 118  |
| 15° | 1195 | 1201  | 1212 | 1220  | 1217 | 337  |
| 25° | 1107 | 1103  | 1118 | 1134  | 1141 | 508  |
| 35° | 967  | 978   | 994  | 1011  | 1017 | 606  |
| 45° | 807  | 818   | 840  | 861   | 880  | 624  |
| 55° | 627  | 642   | 668  | 704   | 711  | 562  |
| 65° | 427  | 445   | 480  | 517   | 536  | 423  |
| 75° | 222  | 240   | 283  | 323   | 339  | 233  |
| 85° | 40   | 57    | 93   | 109   | 114  | 52   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1261.3 | 1261.3 | 1261.3 | 1261.3 | 1261.3 |
| 2.5°  | 1249.9 | 1255.6 | 1260.1 | 1259.0 | 1264.7 |
| 5°    | 1244.2 | 1249.9 | 1255.6 | 1260.1 | 1256.7 |
| 7.5°  | 1237.4 | 1243.1 | 1249.9 | 1256.7 | 1249.9 |
| 10°   | 1226.1 | 1229.5 | 1242.0 | 1243.1 | 1240.8 |
| 12.5° | 1215.8 | 1219.2 | 1228.3 | 1236.3 | 1238.6 |
| 15°   | 1195.4 | 1201.1 | 1212.4 | 1220.4 | 1217.0 |
| 17.5° | 1174.9 | 1182.9 | 1193.1 | 1201.1 | 1201.1 |
| 20°   | 1152.2 | 1157.9 | 1170.4 | 1176.1 | 1186.3 |
| 22.5° | 1126.1 | 1132.9 | 1143.1 | 1159.0 | 1164.7 |
| 25°   | 1106.7 | 1103.3 | 1118.1 | 1134.0 | 1140.8 |
| 27.5° | 1068.1 | 1072.7 | 1093.1 | 1107.9 | 1113.6 |
| 30°   | 1044.2 | 1046.5 | 1057.9 | 1078.3 | 1085.2 |
| 32.5° | 1002.2 | 1009.0 | 1029.5 | 1044.2 | 1056.7 |
| 35°   | 967.0  | 978.3  | 994.2  | 1011.3 | 1017.0 |
| 37.5° | 936.3  | 938.6  | 956.8  | 979.5  | 984.0  |
| 40°   | 890.8  | 904.5  | 918.1  | 946.5  | 953.3  |
| 42.5° | 855.6  | 862.4  | 881.8  | 909.0  | 919.3  |
| 45°   | 806.8  | 818.1  | 839.7  | 861.3  | 879.5  |
| 47.5° | 763.6  | 774.9  | 803.4  | 830.6  | 834.0  |
| 50°   | 726.1  | 730.6  | 759.0  | 789.7  | 793.1  |
| 52.5° | 675.0  | 686.3  | 713.6  | 747.7  | 759.0  |
| 55°   | 627.2  | 642.0  | 668.1  | 704.5  | 711.3  |
| 57.5° | 585.2  | 592.0  | 622.7  | 659.0  | 672.7  |
| 60°   | 528.4  | 547.7  | 576.1  | 611.3  | 623.8  |
| 62.5° | 479.5  | 497.7  | 528.4  | 561.3  | 575.0  |
| 65°   | 427.2  | 445.4  | 479.5  | 517.0  | 536.3  |
| 67.5° | 377.2  | 392.0  | 432.9  | 471.6  | 480.6  |
| 70°   | 325.0  | 342.0  | 380.7  | 420.4  | 438.6  |
| 72.5° | 270.4  | 289.8  | 332.9  | 370.4  | 389.7  |
| 75°   | 221.6  | 239.8  | 282.9  | 322.7  | 338.6  |
| 77.5° | 170.4  | 190.9  | 232.9  | 272.7  | 290.9  |
| 80°   | 121.6  | 142.0  | 186.4  | 226.1  | 242.0  |
| 82.5° | 78.4   | 100.0  | 142.0  | 177.3  | 190.9  |
| 85°   | 39.8   | 56.8   | 93.2   | 109.1  | 113.6  |
| 87.5° | 12.5   | 20.5   | 31.8   | 36.4   | 36.4   |
| 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 | 16.30            | 17.96 | 16.66 | 18.28 | 18.59 | 17.09          | 18.75 | 17.45 | 19.07 | 19.38 |
|                 | 3H   | 18.08            | 19.59 | 18.46 | 19.92 | 20.28 | 19.23          | 20.74 | 19.61 | 21.07 | 21.43 |
|                 | 4H   | 18.72            | 20.14 | 19.11 | 20.49 | 20.87 | 20.15          | 21.58 | 20.55 | 21.93 | 22.30 |
|                 | 6H   | 19.14            | 20.47 | 19.55 | 20.83 | 21.22 | 20.98          | 22.31 | 21.39 | 22.67 | 23.06 |
|                 | 8H   | 19.26            | 20.52 | 19.68 | 20.91 | 21.31 | 21.33          | 22.59 | 21.75 | 22.98 | 23.38 |
|                 | 12H  | 19.31            | 20.53 | 19.74 | 20.91 | 21.34 | 21.57          | 22.78 | 22.00 | 23.17 | 23.59 |
| 4H              | 2H   | 17.07            | 18.50 | 17.47 | 18.84 | 19.22 | 17.68          | 19.11 | 18.08 | 19.46 | 19.83 |
|                 | 3H   | 19.08            | 20.28 | 19.49 | 20.68 | 21.08 | 20.07          | 21.27 | 20.48 | 21.67 | 22.07 |
|                 | 4H   | 19.84            | 20.93 | 20.27 | 21.35 | 21.78 | 21.16          | 22.25 | 21.59 | 22.66 | 23.10 |
|                 | 6H   | 20.39            | 21.35 | 20.84 | 21.79 | 22.24 | 22.15          | 23.11 | 22.61 | 23.55 | 24.01 |
|                 | 8H   | 20.54            | 21.44 | 21.00 | 21.88 | 22.35 | 22.58          | 23.48 | 23.04 | 23.92 | 24.38 |
|                 | 12H  | 20.63            | 21.44 | 21.11 | 21.91 | 22.38 | 22.89          | 23.70 | 23.37 | 24.18 | 24.65 |
| 8H              | 4H   | 20.32            | 21.22 | 20.78 | 21.66 | 22.12 | 21.46          | 22.36 | 21.92 | 22.80 | 23.27 |
|                 | 6H   | 21.01            | 21.76 | 21.50 | 22.25 | 22.72 | 22.63          | 23.38 | 23.12 | 23.86 | 24.34 |
|                 | 8H   | 21.24            | 21.91 | 21.75 | 22.42 | 22.90 | 23.17          | 23.85 | 23.68 | 24.35 | 24.84 |
|                 | 12H  | 21.39            | 21.98 | 21.89 | 22.47 | 23.03 | 23.60          | 24.20 | 24.11 | 24.69 | 25.25 |
| 12H             | 4H   | 20.42            | 21.23 | 20.90 | 21.70 | 22.17 | 21.49          | 22.30 | 21.97 | 22.78 | 23.24 |
|                 | 6H   | 21.16            | 21.83 | 21.67 | 22.34 | 22.82 | 22.68          | 23.36 | 23.19 | 23.86 | 24.35 |
|                 | 8H   | 21.46            | 22.06 | 21.97 | 22.55 | 23.11 | 23.30          | 23.90 | 23.81 | 24.39 | 24.95 |