

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: P1586422

Luminaire Tested: 22CZSP-43HE-L930-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586422  
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-43HE-L930-S  
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 4000 lumens, 90CRI, Smooth Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

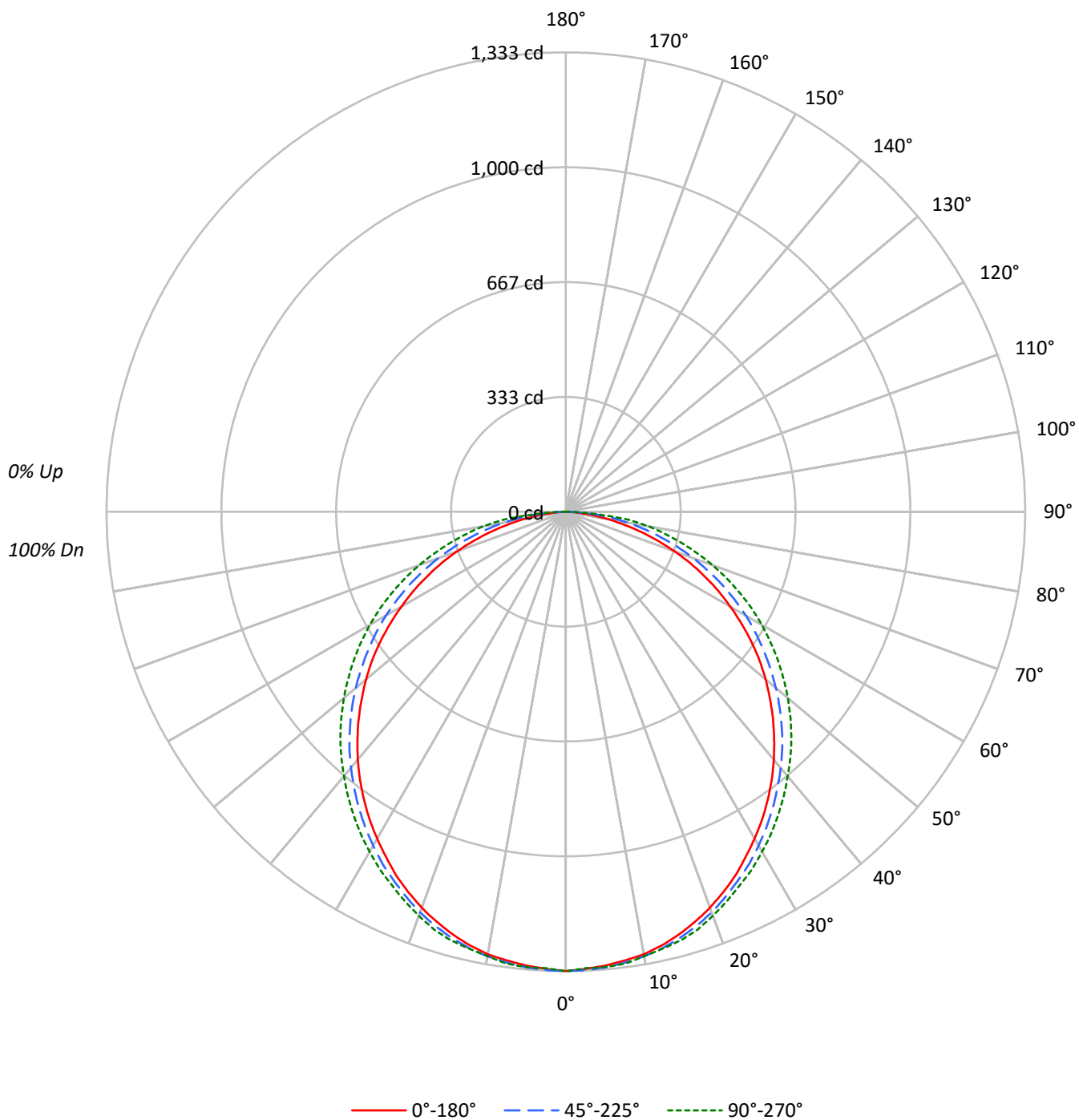
Lumens per Lamp: N/A  
Luminaire Lumens: 3891.0 lumens  
Efficiency: N/A  
Efficacy: 138.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

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

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4173 | 4173 | 4173 |
| 5°  | 4154 | 4171 | 4168 |
| 10° | 4145 | 4164 | 4162 |
| 15° | 4116 | 4149 | 4174 |
| 20° | 4074 | 4122 | 4157 |
| 25° | 4024 | 4080 | 4130 |
| 30° | 3961 | 4044 | 4118 |
| 35° | 3903 | 4005 | 4106 |
| 40° | 3839 | 3965 | 4094 |
| 45° | 3766 | 3924 | 4098 |
| 50° | 3685 | 3876 | 4097 |
| 55° | 3589 | 3822 | 4102 |
| 60° | 3454 | 3780 | 4112 |
| 65° | 3296 | 3707 | 4125 |
| 70° | 3072 | 3604 | 4143 |
| 75° | 2738 | 3460 | 4184 |
| 80° | 2263 | 3295 | 4387 |
| 85° | 1473 | 2975 | 3834 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4527 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 126.0  | 3.2       |
| 10°-20°   | 360.9  | 9.3       |
| 20°-30°   | 544.3  | 14.0      |
| 30°-40°   | 655.6  | 16.8      |
| 40°-50°   | 684.7  | 17.6      |
| 50°-60°   | 628.8  | 16.2      |
| 60°-70°   | 495.3  | 12.7      |
| 70°-80°   | 303.8  | 7.8       |
| 80°-90°   | 91.4   | 2.4       |
| 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°    | 1031.3 | 26.5      |
| 0°-40°    | 1686.9 | 43.4      |
| 0°-60°    | 3000.4 | 77.1      |
| 0°-90°    | 3891.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3891.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1333 | 1333  | 1333 | 1333  | 1333 |      |
| 5°  | 1322 | 1323  | 1327 | 1331  | 1326 | 126  |
| 15° | 1270 | 1272  | 1280 | 1288  | 1288 | 358  |
| 25° | 1165 | 1167  | 1181 | 1195  | 1195 | 536  |
| 35° | 1021 | 1026  | 1048 | 1069  | 1074 | 639  |
| 45° | 850  | 860   | 886  | 917   | 926  | 656  |
| 55° | 657  | 669   | 700  | 739   | 751  | 587  |
| 65° | 445  | 460   | 500  | 542   | 557  | 440  |
| 75° | 226  | 244   | 286  | 331   | 346  | 240  |
| 85° | 41   | 56    | 83   | 105   | 107  | 54   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1332.8 | 1332.8 | 1332.8 | 1332.8 | 1332.8 |
| 2.5°  | 1327.6 | 1330.2 | 1331.1 | 1331.9 | 1325.9 |
| 5°    | 1321.7 | 1323.4 | 1326.8 | 1331.1 | 1325.9 |
| 7.5°  | 1313.1 | 1314.8 | 1319.1 | 1325.1 | 1322.5 |
| 10°   | 1303.7 | 1304.6 | 1309.7 | 1314.0 | 1308.9 |
| 12.5° | 1288.4 | 1290.9 | 1296.9 | 1300.3 | 1298.6 |
| 15°   | 1269.6 | 1272.2 | 1279.8 | 1287.5 | 1287.5 |
| 17.5° | 1247.4 | 1250.8 | 1260.2 | 1270.4 | 1271.3 |
| 20°   | 1222.6 | 1225.2 | 1237.1 | 1247.4 | 1247.4 |
| 22.5° | 1194.5 | 1197.9 | 1209.8 | 1220.9 | 1222.6 |
| 25°   | 1164.6 | 1167.1 | 1180.8 | 1195.3 | 1195.3 |
| 27.5° | 1129.6 | 1134.7 | 1151.8 | 1166.3 | 1169.7 |
| 30°   | 1095.4 | 1099.7 | 1118.5 | 1136.4 | 1139.0 |
| 32.5° | 1059.6 | 1064.7 | 1084.3 | 1104.0 | 1108.2 |
| 35°   | 1021.1 | 1026.3 | 1047.6 | 1068.9 | 1074.1 |
| 37.5° | 981.0  | 987.0  | 1009.2 | 1033.9 | 1039.1 |
| 40°   | 939.2  | 946.0  | 969.9  | 996.4  | 1001.5 |
| 42.5° | 894.8  | 904.2  | 929.8  | 957.1  | 964.8  |
| 45°   | 850.4  | 859.8  | 886.2  | 917.0  | 925.5  |
| 47.5° | 803.4  | 814.5  | 841.8  | 874.3  | 883.7  |
| 50°   | 756.5  | 767.6  | 795.7  | 830.7  | 841.0  |
| 52.5° | 708.6  | 719.7  | 748.8  | 785.5  | 796.6  |
| 55°   | 657.4  | 669.4  | 700.1  | 739.4  | 751.3  |
| 57.5° | 604.5  | 619.9  | 652.3  | 692.4  | 704.4  |
| 60°   | 551.6  | 566.9  | 603.6  | 642.9  | 656.6  |
| 62.5° | 499.5  | 514.0  | 551.6  | 593.4  | 607.9  |
| 65°   | 444.8  | 460.2  | 500.3  | 542.2  | 556.7  |
| 67.5° | 391.0  | 406.4  | 446.5  | 490.1  | 505.4  |
| 70°   | 335.5  | 352.6  | 393.6  | 437.1  | 452.5  |
| 72.5° | 280.0  | 298.0  | 339.8  | 384.2  | 398.7  |
| 75°   | 226.3  | 244.2  | 286.0  | 331.3  | 345.8  |
| 77.5° | 173.3  | 193.0  | 233.9  | 280.0  | 293.7  |
| 80°   | 125.5  | 144.3  | 182.7  | 228.0  | 243.3  |
| 82.5° | 80.3   | 96.5   | 134.9  | 177.6  | 188.7  |
| 85°   | 41.0   | 56.4   | 82.8   | 105.0  | 106.7  |
| 87.5° | 12.8   | 17.9   | 27.3   | 41.0   | 41.8   |
| 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 | 16.44            | 18.10 | 16.81 | 18.42 | 18.73 | 17.27          | 18.93 | 17.64 | 19.25 | 19.56 |
|                 | 3H   | 18.20            | 19.70 | 18.57 | 20.03 | 20.39 | 19.39          | 20.90 | 19.76 | 21.22 | 21.58 |
|                 | 4H   | 18.82            | 20.24 | 19.21 | 20.59 | 20.96 | 20.28          | 21.70 | 20.67 | 22.05 | 22.42 |
|                 | 6H   | 19.23            | 20.55 | 19.64 | 20.91 | 21.30 | 21.06          | 22.38 | 21.47 | 22.74 | 23.13 |
|                 | 8H   | 19.33            | 20.60 | 19.76 | 20.99 | 21.38 | 21.38          | 22.64 | 21.80 | 23.03 | 23.43 |
|                 | 12H  | 19.39            | 20.60 | 19.82 | 20.98 | 21.41 | 21.59          | 22.80 | 22.02 | 23.18 | 23.61 |
| 4H              | 2H   | 17.21            | 18.64 | 17.61 | 18.98 | 19.36 | 17.86          | 19.28 | 18.26 | 19.63 | 20.00 |
|                 | 3H   | 19.19            | 20.39 | 19.60 | 20.79 | 21.18 | 20.21          | 21.41 | 20.62 | 21.81 | 22.21 |
|                 | 4H   | 19.93            | 21.01 | 20.36 | 21.43 | 21.86 | 21.27          | 22.35 | 21.70 | 22.77 | 23.20 |
|                 | 6H   | 20.46            | 21.41 | 20.91 | 21.85 | 22.30 | 22.22          | 23.17 | 22.67 | 23.61 | 24.06 |
|                 | 8H   | 20.60            | 21.49 | 21.06 | 21.94 | 22.40 | 22.62          | 23.51 | 23.08 | 23.95 | 24.41 |
|                 | 12H  | 20.69            | 21.49 | 21.17 | 21.96 | 22.43 | 22.89          | 23.70 | 23.37 | 24.17 | 24.64 |
| 8H              | 4H   | 20.39            | 21.28 | 20.85 | 21.72 | 22.18 | 21.56          | 22.45 | 22.01 | 22.89 | 23.35 |
|                 | 6H   | 21.05            | 21.79 | 21.54 | 22.28 | 22.75 | 22.67          | 23.41 | 23.16 | 23.90 | 24.37 |
|                 | 8H   | 21.26            | 21.93 | 21.77 | 22.43 | 22.92 | 23.18          | 23.85 | 23.69 | 24.35 | 24.84 |
|                 | 12H  | 21.40            | 21.99 | 21.90 | 22.48 | 23.04 | 23.57          | 24.16 | 24.07 | 24.65 | 25.21 |
| 12H             | 4H   | 20.48            | 21.28 | 20.96 | 21.75 | 22.22 | 21.58          | 22.38 | 22.06 | 22.86 | 23.33 |
|                 | 6H   | 21.18            | 21.85 | 21.69 | 22.35 | 22.84 | 22.71          | 23.38 | 23.22 | 23.89 | 24.37 |
|                 | 8H   | 21.46            | 22.05 | 21.96 | 22.54 | 23.10 | 23.29          | 23.89 | 23.80 | 24.37 | 24.93 |