

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: P1585747

Luminaire Tested: 14CZSP-SB-49HE-L940

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1585747  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 14CZSP-SB-49HE-L940  
Description: 1x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Ribbed Lens, SB housing  
Light Source: -  
Ballast/Driver: -

**Summary**

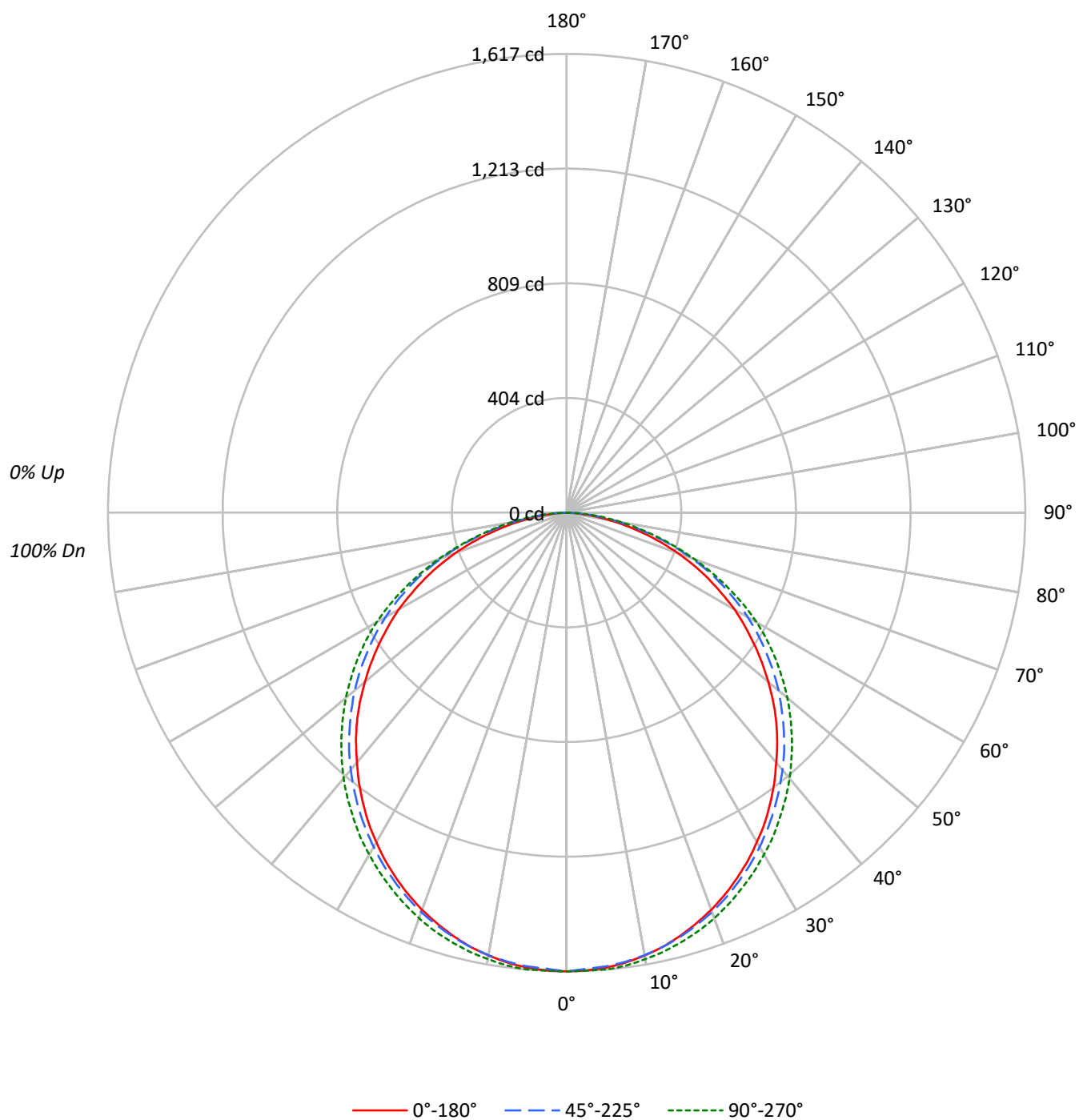
Lumens per Lamp: N/A  
Luminaire Lumens: 4672.0 lumens  
Efficiency: N/A  
Efficacy: 141.1 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  |  | 93  | 91  | 88  |  | 90  | 88  | 86  | 84  |
| 2   | 99  | 90  | 83  | 78  | 96  | 88  | 82  | 77  | 85  | 79  | 75  |  | 82  | 77  | 73  |  | 79  | 75  | 71  | 69  |
| 3   | 90  | 79  | 71  | 64  | 87  | 78  | 70  | 64  | 75  | 68  | 63  |  | 72  | 66  | 61  |  | 69  | 64  | 60  | 58  |
| 4   | 82  | 70  | 61  | 54  | 80  | 69  | 60  | 54  | 66  | 59  | 53  |  | 64  | 58  | 52  |  | 62  | 56  | 52  | 50  |
| 5   | 75  | 62  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  |  | 57  | 51  | 45  |  | 55  | 50  | 45  | 43  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 40  | 53  | 46  | 40  |  | 52  | 45  | 40  |  | 50  | 44  | 39  | 37  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 35  |  | 47  | 40  | 35  |  | 46  | 40  | 35  | 33  |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  |  | 43  | 36  | 31  |  | 42  | 36  | 31  | 29  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 28  |  | 40  | 33  | 28  |  | 39  | 33  | 28  | 26  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  |  | 37  | 30  | 26  |  | 36  | 30  | 26  | 24  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5449 | 5449 | 5449 |
| 5°  | 5445 | 5431 | 5468 |
| 10° | 5425 | 5420 | 5469 |
| 15° | 5390 | 5402 | 5465 |
| 20° | 5343 | 5374 | 5456 |
| 25° | 5284 | 5334 | 5434 |
| 30° | 5219 | 5295 | 5415 |
| 35° | 5146 | 5251 | 5395 |
| 40° | 5056 | 5207 | 5382 |
| 45° | 4984 | 5160 | 5352 |
| 50° | 4865 | 5112 | 5327 |
| 55° | 4740 | 5045 | 5286 |
| 60° | 4612 | 4971 | 5215 |
| 65° | 4405 | 4840 | 5017 |
| 70° | 4110 | 4622 | 4734 |
| 75° | 3662 | 4188 | 4311 |
| 80° | 2990 | 3631 | 3813 |
| 85° | 1976 | 2888 | 3097 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5352 cd/sqm

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CATALOG NUMBER: 14CZSP-SB-49HE-L940

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 153.2  | 3.3       |
| 10°-20°   | 438.7  | 9.4       |
| 20°-30°   | 664.3  | 14.2      |
| 30°-40°   | 801.8  | 17.2      |
| 40°-50°   | 837.3  | 17.9      |
| 50°-60°   | 766.0  | 16.4      |
| 60°-70°   | 592.2  | 12.7      |
| 70°-80°   | 335.2  | 7.2       |
| 80°-90°   | 83.3   | 1.8       |
| 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°    | 1256.2 | 26.9      |
| 0°-40°    | 2058.0 | 44.0      |
| 0°-60°    | 3661.3 | 78.4      |
| 0°-90°    | 4672.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4672.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1617 | 1617  | 1617 | 1617  | 1617 |      |
| 5°  | 1610 | 1621  | 1606 | 1607  | 1616 | 153  |
| 15° | 1545 | 1559  | 1548 | 1556  | 1567 | 436  |
| 25° | 1421 | 1440  | 1435 | 1448  | 1462 | 655  |
| 35° | 1251 | 1269  | 1277 | 1298  | 1312 | 783  |
| 45° | 1046 | 1066  | 1083 | 1110  | 1123 | 805  |
| 55° | 807  | 831   | 859  | 886   | 900  | 722  |
| 65° | 552  | 575   | 607  | 625   | 629  | 545  |
| 75° | 281  | 306   | 322  | 330   | 331  | 298  |
| 85° | 51   | 59    | 75   | 78    | 80   | 66   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1617.2 | 1617.2 | 1617.2 | 1617.2 | 1617.2 |
| 2.5°  | 1615.2 | 1626.6 | 1609.1 | 1612.5 | 1615.8 |
| 5°    | 1609.8 | 1621.2 | 1605.7 | 1607.1 | 1616.5 |
| 7.5°  | 1599.7 | 1612.5 | 1596.3 | 1599.0 | 1610.4 |
| 10°   | 1585.5 | 1598.3 | 1584.2 | 1586.9 | 1598.3 |
| 12.5° | 1567.4 | 1580.2 | 1568.0 | 1572.1 | 1584.9 |
| 15°   | 1545.2 | 1558.6 | 1548.5 | 1555.9 | 1566.7 |
| 17.5° | 1518.2 | 1535.1 | 1524.3 | 1535.7 | 1546.5 |
| 20°   | 1490.0 | 1506.8 | 1498.7 | 1508.8 | 1521.6 |
| 22.5° | 1457.7 | 1474.5 | 1468.4 | 1479.2 | 1493.3 |
| 25°   | 1421.3 | 1439.5 | 1434.8 | 1448.3 | 1461.7 |
| 27.5° | 1383.7 | 1401.1 | 1399.8 | 1414.6 | 1428.7 |
| 30°   | 1341.3 | 1360.1 | 1360.8 | 1378.3 | 1391.7 |
| 32.5° | 1298.9 | 1315.7 | 1319.7 | 1339.2 | 1354.7 |
| 35°   | 1251.1 | 1268.6 | 1276.6 | 1298.2 | 1311.6 |
| 37.5° | 1202.6 | 1222.1 | 1230.9 | 1254.4 | 1268.6 |
| 40°   | 1149.5 | 1171.7 | 1183.8 | 1208.7 | 1223.5 |
| 42.5° | 1099.0 | 1119.2 | 1135.3 | 1160.2 | 1173.7 |
| 45°   | 1045.8 | 1066.0 | 1082.8 | 1110.4 | 1123.2 |
| 47.5° | 988.6  | 1010.8 | 1029.0 | 1055.9 | 1070.0 |
| 50°   | 928.0  | 952.3  | 975.2  | 1001.4 | 1016.2 |
| 52.5° | 868.1  | 891.7  | 917.9  | 943.5  | 958.3  |
| 55°   | 806.9  | 831.1  | 858.7  | 885.6  | 899.8  |
| 57.5° | 745.0  | 769.2  | 799.5  | 823.7  | 838.5  |
| 60°   | 684.4  | 706.6  | 737.6  | 761.8  | 773.9  |
| 62.5° | 615.8  | 641.4  | 673.0  | 697.2  | 703.9  |
| 65°   | 552.5  | 575.4  | 607.0  | 625.2  | 629.2  |
| 67.5° | 485.2  | 508.1  | 539.7  | 549.8  | 555.9  |
| 70°   | 417.2  | 441.5  | 469.1  | 475.8  | 480.5  |
| 72.5° | 348.6  | 373.5  | 395.0  | 401.8  | 405.8  |
| 75°   | 281.3  | 305.5  | 321.7  | 329.8  | 331.1  |
| 77.5° | 216.0  | 238.2  | 253.0  | 262.5  | 262.5  |
| 80°   | 154.1  | 170.9  | 187.1  | 197.2  | 196.5  |
| 82.5° | 98.3   | 111.0  | 127.9  | 135.3  | 140.0  |
| 85°   | 51.1   | 59.2   | 74.7   | 78.1   | 80.1   |
| 87.5° | 16.2   | 20.9   | 26.9   | 22.2   | 21.5   |
| 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 | 17.57            | 19.22 | 17.94 | 19.54 | 19.85 | 18.11          | 19.76 | 18.48 | 20.08 | 20.39 |
|                 | 3H   | 19.34            | 20.84 | 19.72 | 21.16 | 21.52 | 19.97          | 21.47 | 20.35 | 21.79 | 22.15 |
|                 | 4H   | 19.97            | 21.37 | 20.36 | 21.72 | 22.10 | 20.64          | 22.05 | 21.04 | 22.40 | 22.77 |
|                 | 6H   | 20.37            | 21.68 | 20.78 | 22.04 | 22.43 | 21.13          | 22.43 | 21.54 | 22.80 | 23.19 |
|                 | 8H   | 20.47            | 21.72 | 20.90 | 22.11 | 22.51 | 21.29          | 22.53 | 21.71 | 22.92 | 23.32 |
|                 | 12H  | 20.52            | 21.72 | 20.95 | 22.10 | 22.53 | 21.38          | 22.58 | 21.81 | 22.96 | 23.39 |
| 4H              | 2H   | 18.31            | 19.72 | 18.71 | 20.06 | 20.44 | 18.73          | 20.14 | 19.13 | 20.49 | 20.86 |
|                 | 3H   | 20.30            | 21.48 | 20.71 | 21.88 | 22.28 | 20.81          | 21.99 | 21.22 | 22.39 | 22.79 |
|                 | 4H   | 21.05            | 22.12 | 21.48 | 22.53 | 22.97 | 21.61          | 22.68 | 22.04 | 23.09 | 23.53 |
|                 | 6H   | 21.57            | 22.50 | 22.02 | 22.94 | 23.40 | 22.23          | 23.16 | 22.68 | 23.60 | 24.06 |
|                 | 8H   | 21.71            | 22.58 | 22.16 | 23.02 | 23.49 | 22.43          | 23.30 | 22.89 | 23.75 | 24.21 |
|                 | 12H  | 21.78            | 22.57 | 22.26 | 23.04 | 23.51 | 22.57          | 23.36 | 23.05 | 23.83 | 24.30 |
| 8H              | 4H   | 21.41            | 22.28 | 21.87 | 22.72 | 23.19 | 21.90          | 22.78 | 22.36 | 23.22 | 23.68 |
|                 | 6H   | 22.04            | 22.77 | 22.53 | 23.25 | 23.73 | 22.63          | 23.36 | 23.13 | 23.85 | 24.32 |
|                 | 8H   | 22.23            | 22.88 | 22.74 | 23.39 | 23.88 | 22.91          | 23.56 | 23.41 | 24.06 | 24.55 |
|                 | 12H  | 22.36            | 22.93 | 22.86 | 23.42 | 23.98 | 23.11          | 23.69 | 23.62 | 24.18 | 24.74 |
| 12H             | 4H   | 21.45            | 22.23 | 21.93 | 22.71 | 23.18 | 21.92          | 22.71 | 22.40 | 23.19 | 23.66 |
|                 | 6H   | 22.10            | 22.76 | 22.61 | 23.26 | 23.75 | 22.67          | 23.33 | 23.18 | 23.83 | 24.32 |
|                 | 8H   | 22.35            | 22.93 | 22.86 | 23.42 | 23.98 | 23.00          | 23.58 | 23.51 | 24.07 | 24.63 |