

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: P1584416

Luminaire Tested: 14CZSP-60VHE-L840-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1584416  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 14CZSP-60VHE-L840-S  
Description: 1x4 CZSP LED Luminaire, 4000K CCT and 6200 lumens, 80CRI, Smooth Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

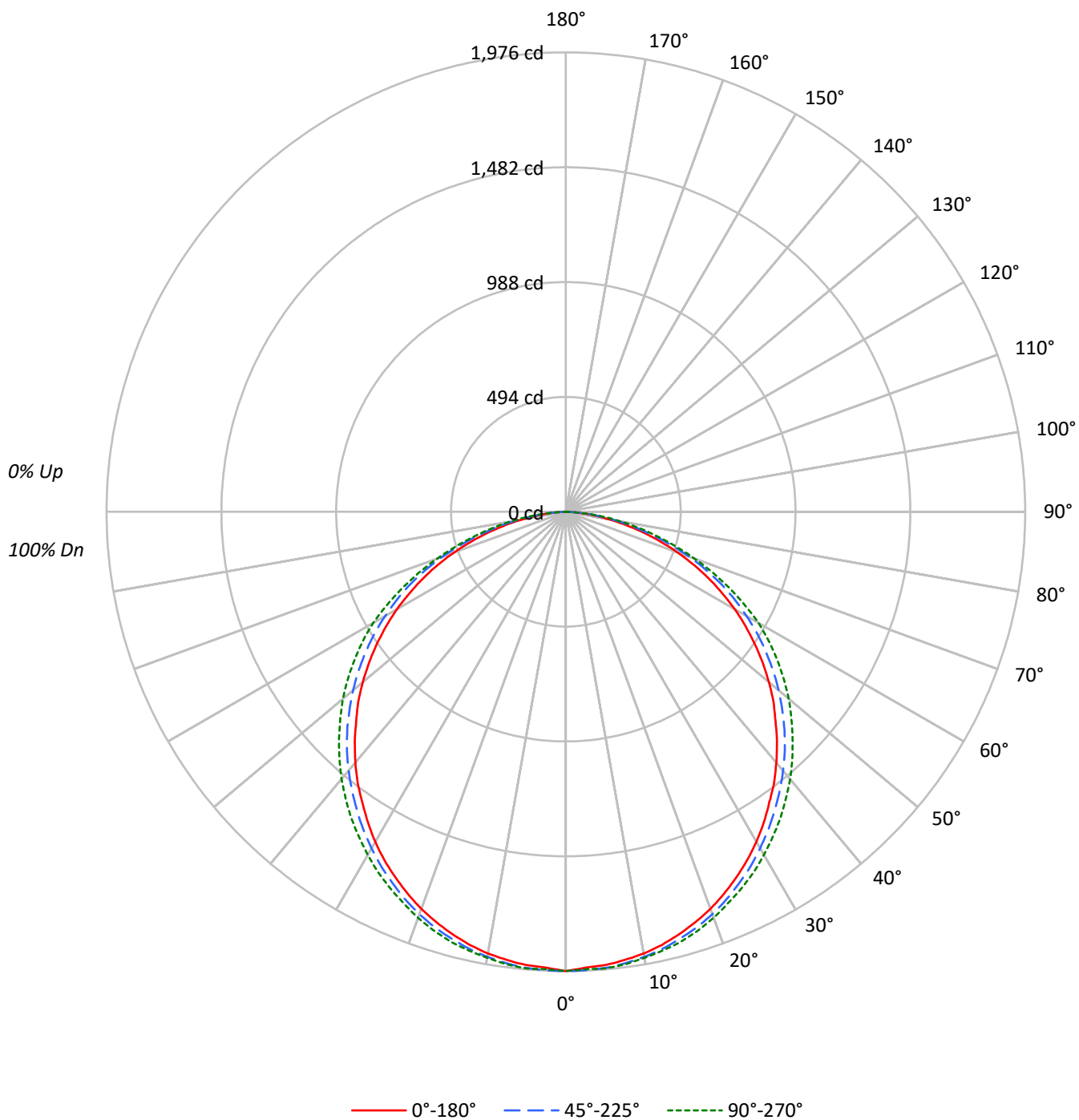
Lumens per Lamp: N/A  
Luminaire Lumens: 5712.0 lumens  
Efficiency: N/A  
Efficacy: 130.1 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.9  
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

TEST NUMBER: P1584416

CATALOG NUMBER: 14CZSP-60VHE-L840-S

### Luminous Intensity Polar Plot



TEST NUMBER: P1584416

CATALOG NUMBER: 14CZSP-60VHE-L840-S

**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  | 80  | 75  |  | 82  | 77  | 73  |  | 79  | 75  | 72  | 69  |
| 3   | 90  | 79  | 71  | 64  | 87  | 78  | 70  | 64  | 75  | 68  | 63  |  | 72  | 66  | 62  |  | 69  | 65  | 60  | 58  |
| 4   | 82  | 70  | 61  | 54  | 80  | 69  | 60  | 54  | 66  | 59  | 53  |  | 64  | 58  | 52  |  | 62  | 56  | 52  | 50  |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  |  | 57  | 51  | 45  |  | 55  | 50  | 45  | 43  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 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  | 59  | 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°  | 6658 | 6658 | 6658 |
| 5°  | 6620 | 6663 | 6669 |
| 10° | 6602 | 6651 | 6665 |
| 15° | 6564 | 6632 | 6678 |
| 20° | 6518 | 6605 | 6666 |
| 25° | 6452 | 6555 | 6646 |
| 30° | 6379 | 6503 | 6631 |
| 35° | 6277 | 6447 | 6619 |
| 40° | 6195 | 6394 | 6602 |
| 45° | 6078 | 6338 | 6575 |
| 50° | 5977 | 6263 | 6563 |
| 55° | 5833 | 6174 | 6520 |
| 60° | 5655 | 6051 | 6453 |
| 65° | 5403 | 5886 | 6187 |
| 70° | 5036 | 5558 | 5807 |
| 75° | 4499 | 5014 | 5297 |
| 80° | 3687 | 4226 | 4634 |
| 85° | 2470 | 3089 | 3445 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6575 cd/sqm

TEST NUMBER: P1584416

CATALOG NUMBER: 14CZSP-60VHE-L840-S

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 187.1  | 3.3       |
| 10°-20°   | 536.5  | 9.4       |
| 20°-30°   | 812.3  | 14.2      |
| 30°-40°   | 980.9  | 17.2      |
| 40°-50°   | 1025.2 | 17.9      |
| 50°-60°   | 939.4  | 16.4      |
| 60°-70°   | 725.1  | 12.7      |
| 70°-80°   | 407.9  | 7.1       |
| 80°-90°   | 97.6   | 1.7       |
| 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°    | 1535.9 | 26.9      |
| 0°-40°    | 2516.8 | 44.1      |
| 0°-60°    | 4481.4 | 78.5      |
| 0°-90°    | 5712.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5712.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1976 | 1976  | 1976 | 1976  | 1976 |      |
| 5°  | 1957 | 1972  | 1970 | 1972  | 1972 | 186  |
| 15° | 1882 | 1897  | 1901 | 1908  | 1914 | 531  |
| 25° | 1735 | 1750  | 1763 | 1772  | 1788 | 800  |
| 35° | 1526 | 1545  | 1567 | 1588  | 1609 | 956  |
| 45° | 1275 | 1301  | 1330 | 1357  | 1380 | 986  |
| 55° | 993  | 1019  | 1051 | 1084  | 1110 | 887  |
| 65° | 678  | 707   | 738  | 768   | 776  | 670  |
| 75° | 346  | 378   | 385  | 401   | 407  | 366  |
| 85° | 64   | 73    | 80   | 87    | 89   | 82   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1584416

CATALOG NUMBER: 14CZSP-60VHE-L840-S

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1975.8 | 1975.8 | 1975.8 | 1975.8 | 1975.8 |
| 2.5°  | 1962.3 | 1977.5 | 1974.1 | 1979.1 | 1969.9 |
| 5°    | 1957.3 | 1971.6 | 1969.9 | 1971.6 | 1971.6 |
| 7.5°  | 1944.7 | 1959.8 | 1959.0 | 1961.5 | 1963.2 |
| 10°   | 1929.5 | 1943.8 | 1943.8 | 1946.4 | 1948.0 |
| 12.5° | 1908.5 | 1923.7 | 1925.3 | 1929.5 | 1932.9 |
| 15°   | 1881.6 | 1896.8 | 1901.0 | 1908.5 | 1914.4 |
| 17.5° | 1851.4 | 1867.3 | 1874.1 | 1881.6 | 1889.2 |
| 20°   | 1817.7 | 1832.0 | 1842.1 | 1848.0 | 1858.9 |
| 22.5° | 1778.2 | 1794.2 | 1805.1 | 1811.0 | 1822.8 |
| 25°   | 1735.3 | 1750.5 | 1763.1 | 1772.3 | 1787.5 |
| 27.5° | 1689.9 | 1705.1 | 1720.2 | 1731.1 | 1748.8 |
| 30°   | 1639.5 | 1655.5 | 1671.4 | 1688.2 | 1704.2 |
| 32.5° | 1584.8 | 1603.3 | 1621.0 | 1639.5 | 1657.1 |
| 35°   | 1526.0 | 1545.3 | 1567.2 | 1588.2 | 1609.2 |
| 37.5° | 1471.3 | 1489.0 | 1511.7 | 1534.4 | 1555.4 |
| 40°   | 1408.3 | 1427.6 | 1453.7 | 1478.9 | 1500.8 |
| 42.5° | 1344.4 | 1365.4 | 1394.0 | 1418.4 | 1441.9 |
| 45°   | 1275.4 | 1300.7 | 1330.1 | 1357.0 | 1379.7 |
| 47.5° | 1211.5 | 1233.4 | 1262.8 | 1292.2 | 1315.8 |
| 50°   | 1140.1 | 1164.5 | 1194.7 | 1225.8 | 1251.9 |
| 52.5° | 1067.8 | 1093.0 | 1124.1 | 1155.2 | 1182.1 |
| 55°   | 992.9  | 1019.0 | 1050.9 | 1083.7 | 1109.8 |
| 57.5° | 916.4  | 944.2  | 977.0  | 1009.8 | 1035.8 |
| 60°   | 839.1  | 866.8  | 897.9  | 934.1  | 957.6  |
| 62.5° | 758.4  | 789.5  | 818.9  | 852.5  | 866.8  |
| 65°   | 677.7  | 707.1  | 738.2  | 767.6  | 776.0  |
| 67.5° | 595.3  | 625.5  | 653.3  | 672.6  | 683.5  |
| 70°   | 511.2  | 544.0  | 564.1  | 582.6  | 589.4  |
| 72.5° | 427.9  | 460.7  | 472.5  | 490.2  | 496.9  |
| 75°   | 345.6  | 377.5  | 385.1  | 401.0  | 406.9  |
| 77.5° | 265.7  | 295.1  | 297.6  | 316.1  | 321.2  |
| 80°   | 190.0  | 213.6  | 217.8  | 235.4  | 238.8  |
| 82.5° | 121.9  | 138.7  | 144.6  | 159.7  | 164.8  |
| 85°   | 63.9   | 73.1   | 79.9   | 87.4   | 89.1   |
| 87.5° | 21.0   | 26.1   | 21.9   | 22.7   | 21.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1584416

CATALOG NUMBER: 14CZSP-60VHE-L840-S

**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 | 18.30            | 19.95 | 18.66 | 20.26 | 20.58 | 18.84          | 20.49 | 19.20 | 20.80 | 21.12 |
|                 | 3H   | 20.07            | 21.57 | 20.45 | 21.89 | 22.25 | 20.70          | 22.19 | 21.07 | 22.51 | 22.87 |
|                 | 4H   | 20.70            | 22.11 | 21.10 | 22.46 | 22.83 | 21.36          | 22.77 | 21.76 | 23.12 | 23.49 |
|                 | 6H   | 21.11            | 22.41 | 21.52 | 22.78 | 23.17 | 21.84          | 23.15 | 22.25 | 23.51 | 23.90 |
|                 | 8H   | 21.21            | 22.46 | 21.64 | 22.85 | 23.25 | 21.99          | 23.23 | 22.41 | 23.62 | 24.02 |
|                 | 12H  | 21.26            | 22.46 | 21.69 | 22.84 | 23.27 | 22.07          | 23.26 | 22.50 | 23.65 | 24.07 |
| 4H              | 2H   | 19.02            | 20.43 | 19.42 | 20.78 | 21.15 | 19.45          | 20.85 | 19.84 | 21.20 | 21.58 |
|                 | 3H   | 21.02            | 22.20 | 21.43 | 22.60 | 22.99 | 21.52          | 22.70 | 21.93 | 23.09 | 23.49 |
|                 | 4H   | 21.78            | 22.84 | 22.21 | 23.26 | 23.69 | 22.31          | 23.38 | 22.74 | 23.79 | 24.23 |
|                 | 6H   | 22.30            | 23.24 | 22.76 | 23.68 | 24.13 | 22.92          | 23.85 | 23.37 | 24.29 | 24.74 |
|                 | 8H   | 22.44            | 23.32 | 22.90 | 23.76 | 24.22 | 23.11          | 23.98 | 23.57 | 24.42 | 24.89 |
|                 | 12H  | 22.52            | 23.31 | 23.00 | 23.78 | 24.25 | 23.23          | 24.01 | 23.71 | 24.49 | 24.96 |
| 8H              | 4H   | 22.11            | 22.99 | 22.57 | 23.43 | 23.89 | 22.59          | 23.46 | 23.05 | 23.90 | 24.37 |
|                 | 6H   | 22.75            | 23.48 | 23.25 | 23.97 | 24.44 | 23.30          | 24.03 | 23.79 | 24.52 | 24.99 |
|                 | 8H   | 22.95            | 23.60 | 23.46 | 24.11 | 24.59 | 23.56          | 24.21 | 24.07 | 24.72 | 25.20 |
|                 | 12H  | 23.08            | 23.66 | 23.59 | 24.15 | 24.71 | 23.74          | 24.32 | 24.25 | 24.81 | 25.37 |
| 12H             | 4H   | 22.15            | 22.93 | 22.63 | 23.41 | 23.88 | 22.61          | 23.40 | 23.09 | 23.87 | 24.34 |
|                 | 6H   | 22.81            | 23.46 | 23.32 | 23.97 | 24.45 | 23.34          | 23.99 | 23.85 | 24.50 | 24.98 |
|                 | 8H   | 23.06            | 23.63 | 23.57 | 24.12 | 24.68 | 23.65          | 24.22 | 24.15 | 24.71 | 25.27 |