

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: FAIL-SAFE

Report Number: P1498909

Luminaire Tested: MAE-G-4-120-1HI-50-VRDCPH

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1498909  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27581)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/26/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: MAE-G-4-120-1HI-50-VRDCPH  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 1 HI ambient illumination levels  
Light Source: -  
Ballast/Driver: -

**Summary**

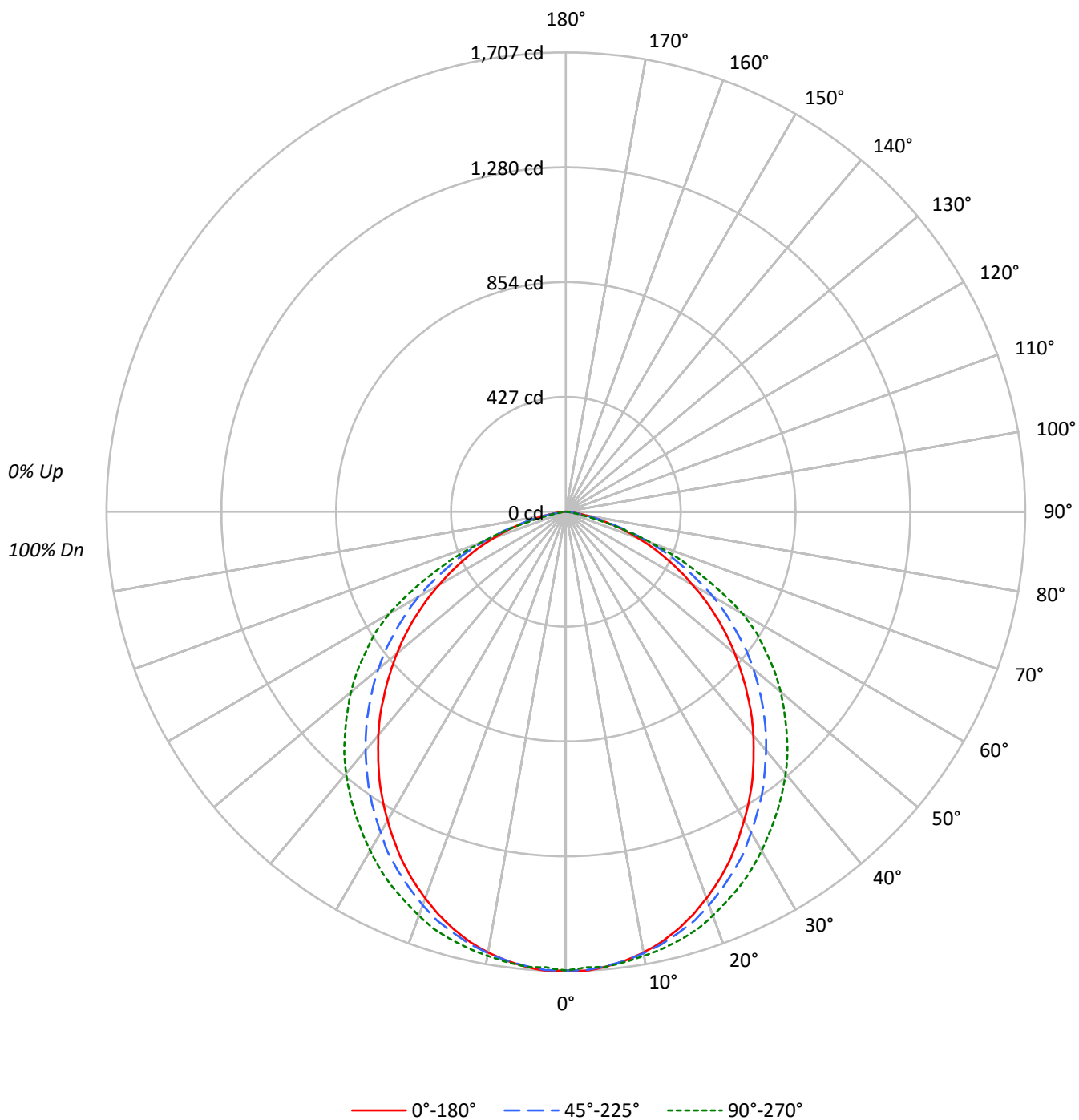
Lumens per Lamp: N/A  
Luminaire Lumens: 4292.0 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.27 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 44.3  
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: P1498909

CATALOG NUMBER: MAE-G-4-120-1HI-50-VRDCPH

### Luminous Intensity Polar Plot



TEST NUMBER: P1498909

CATALOG NUMBER: MAE-G-4-120-1HI-50-VRDCPH

**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  | 30  | 10  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 110 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  | 86  |    |    |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 73  |    |    |
| 3   | 92  | 82  | 74  | 68  | 90  | 80  | 73  | 67  | 77  | 71  | 66  | 75  | 70  | 65  | 72  | 68  | 64  | 62  |    |    |
| 4   | 84  | 73  | 65  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 55  | 53  |    |    |
| 5   | 78  | 65  | 57  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 49  | 60  | 54  | 49  | 58  | 53  | 48  | 46  |    |    |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  | 55  | 48  | 43  | 53  | 47  | 43  | 41  |    |    |
| 7   | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 38  | 48  | 43  | 38  | 36  |    |    |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 40  | 35  | 47  | 40  | 35  | 46  | 39  | 34  | 45  | 39  | 34  | 32  |    |    |
| 9   | 58  | 45  | 37  | 31  | 57  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 29  |    |    |
| 10  | 54  | 41  | 34  | 29  | 53  | 41  | 34  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2294 | 2294 | 2294 |
| 5°  | 2293 | 2289 | 2293 |
| 10° | 2272 | 2276 | 2289 |
| 15° | 2238 | 2255 | 2293 |
| 20° | 2188 | 2227 | 2287 |
| 25° | 2130 | 2189 | 2276 |
| 30° | 2058 | 2138 | 2260 |
| 35° | 1986 | 2091 | 2244 |
| 40° | 1904 | 2034 | 2232 |
| 45° | 1811 | 1974 | 2208 |
| 50° | 1715 | 1905 | 2182 |
| 55° | 1605 | 1813 | 2129 |
| 60° | 1466 | 1703 | 2046 |
| 65° | 1312 | 1523 | 1757 |
| 70° | 1119 | 1283 | 1341 |
| 75° | 867  | 931  | 752  |
| 80° | 570  | 494  | 266  |
| 85° | 303  | 227  | 151  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2208 cd/sqm

TEST NUMBER: P1498909

CATALOG NUMBER: MAE-G-4-120-1HI-50-VRDCPH

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 161.0  | 3.8       |
| 10°-20°   | 457.5  | 10.7      |
| 20°-30°   | 680.3  | 15.9      |
| 30°-40°   | 799.8  | 18.6      |
| 40°-50°   | 807.3  | 18.8      |
| 50°-60°   | 700.9  | 16.3      |
| 60°-70°   | 477.1  | 11.1      |
| 70°-80°   | 185.8  | 4.3       |
| 80°-90°   | 22.2   | 0.5       |
| 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       |
| 0°-30°    | 1298.8 | 30.3      |
| 0°-40°    | 2098.6 | 48.9      |
| 0°-60°    | 3606.8 | 84.0      |
| 0°-90°    | 4292.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4292.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1705 | 1705  | 1705 | 1705  | 1705 |      |
| 5°  | 1698 | 1695  | 1695 | 1695  | 1698 | 161  |
| 15° | 1607 | 1609  | 1619 | 1636  | 1646 | 452  |
| 25° | 1435 | 1442  | 1474 | 1511  | 1533 | 660  |
| 35° | 1209 | 1224  | 1273 | 1332  | 1366 | 755  |
| 45° | 952  | 976   | 1038 | 1119  | 1160 | 735  |
| 55° | 684  | 706   | 773  | 861   | 908  | 611  |
| 65° | 412  | 432   | 478  | 530   | 552  | 409  |
| 75° | 167  | 177   | 179  | 162   | 145  | 181  |
| 85° | 20   | 20    | 15   | 12    | 10   | 29   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1498909

CATALOG NUMBER: MAE-G-4-120-1HI-50-VRDCPH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1704.8 | 1704.8 | 1704.8 | 1704.8 | 1704.8 |
| 2.5°  | 1707.3 | 1707.3 | 1704.8 | 1697.5 | 1695.0 |
| 5°    | 1697.5 | 1695.0 | 1695.0 | 1695.0 | 1697.5 |
| 7.5°  | 1682.7 | 1682.7 | 1682.7 | 1685.2 | 1687.6 |
| 10°   | 1663.1 | 1663.1 | 1665.6 | 1670.5 | 1675.4 |
| 12.5° | 1638.6 | 1641.0 | 1645.9 | 1655.8 | 1663.1 |
| 15°   | 1606.7 | 1609.1 | 1619.0 | 1636.1 | 1645.9 |
| 17.5° | 1569.9 | 1577.3 | 1592.0 | 1611.6 | 1626.3 |
| 20°   | 1528.2 | 1535.6 | 1555.2 | 1579.7 | 1596.9 |
| 22.5° | 1484.0 | 1491.4 | 1515.9 | 1545.4 | 1565.0 |
| 25°   | 1435.0 | 1442.3 | 1474.2 | 1511.0 | 1533.1 |
| 27.5° | 1381.0 | 1390.8 | 1430.1 | 1469.3 | 1496.3 |
| 30°   | 1324.6 | 1336.9 | 1376.1 | 1425.2 | 1454.6 |
| 32.5° | 1268.2 | 1282.9 | 1324.6 | 1381.0 | 1410.5 |
| 35°   | 1209.3 | 1224.0 | 1273.1 | 1332.0 | 1366.3 |
| 37.5° | 1145.5 | 1162.7 | 1214.2 | 1285.4 | 1319.7 |
| 40°   | 1084.2 | 1101.4 | 1157.8 | 1233.8 | 1270.6 |
| 42.5° | 1020.4 | 1040.1 | 1098.9 | 1177.4 | 1219.1 |
| 45°   | 951.8  | 976.3  | 1037.6 | 1118.6 | 1160.3 |
| 47.5° | 885.5  | 907.6  | 973.8  | 1057.2 | 1101.4 |
| 50°   | 819.3  | 843.8  | 910.1  | 995.9  | 1042.5 |
| 52.5° | 753.1  | 775.1  | 843.8  | 929.7  | 978.7  |
| 55°   | 684.4  | 706.5  | 772.7  | 861.0  | 907.6  |
| 57.5° | 615.7  | 642.7  | 704.0  | 789.9  | 841.4  |
| 60°   | 544.6  | 569.1  | 632.9  | 718.7  | 760.4  |
| 62.5° | 478.3  | 500.4  | 554.4  | 635.3  | 654.9  |
| 65°   | 412.1  | 431.7  | 478.3  | 529.8  | 551.9  |
| 67.5° | 350.8  | 365.5  | 407.2  | 441.5  | 451.3  |
| 70°   | 284.5  | 299.3  | 326.2  | 345.9  | 341.0  |
| 72.5° | 225.7  | 235.5  | 252.7  | 250.2  | 237.9  |
| 75°   | 166.8  | 176.6  | 179.1  | 161.9  | 144.7  |
| 77.5° | 117.7  | 122.6  | 115.3  | 90.8   | 73.6   |
| 80°   | 73.6   | 76.0   | 63.8   | 39.2   | 34.3   |
| 82.5° | 41.7   | 41.7   | 29.4   | 24.5   | 19.6   |
| 85°   | 19.6   | 19.6   | 14.7   | 12.3   | 9.8    |
| 87.5° | 7.4    | 7.4    | 4.9    | 4.9    | 4.9    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1498909

CATALOG NUMBER: MAE-G-4-120-1HI-50-VRDCPH

**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 | 13.49            | 15.07 | 13.85 | 15.38 | 15.70 | 15.07          | 16.65 | 15.43 | 16.96 | 17.28 |
|                 | 3H   | 14.82            | 16.24 | 15.20 | 16.57 | 16.93 | 16.34          | 17.75 | 16.71 | 18.08 | 18.44 |
|                 | 4H   | 15.19            | 16.52 | 15.59 | 16.87 | 17.25 | 16.53          | 17.86 | 16.93 | 18.21 | 18.59 |
|                 | 6H   | 15.36            | 16.58 | 15.77 | 16.95 | 17.34 | 16.53          | 17.76 | 16.94 | 18.12 | 18.51 |
|                 | 8H   | 15.37            | 16.54 | 15.80 | 16.93 | 17.33 | 16.50          | 17.67 | 16.93 | 18.06 | 18.46 |
|                 | 12H  | 15.36            | 16.48 | 15.79 | 16.87 | 17.29 | 16.48          | 17.60 | 16.91 | 17.98 | 18.41 |
| 4H              | 2H   | 14.15            | 15.48 | 14.55 | 15.83 | 16.21 | 15.45          | 16.77 | 15.84 | 17.12 | 17.50 |
|                 | 3H   | 15.65            | 16.75 | 16.06 | 17.15 | 17.55 | 16.88          | 17.98 | 17.29 | 18.38 | 18.78 |
|                 | 4H   | 16.09            | 17.08 | 16.53 | 17.50 | 17.93 | 17.14          | 18.13 | 17.57 | 18.54 | 18.98 |
|                 | 6H   | 16.32            | 17.18 | 16.77 | 17.62 | 18.08 | 17.16          | 18.02 | 17.62 | 18.46 | 18.92 |
|                 | 8H   | 16.34            | 17.14 | 16.81 | 17.59 | 18.05 | 17.14          | 17.94 | 17.60 | 18.38 | 18.85 |
|                 | 12H  | 16.35            | 17.06 | 16.83 | 17.54 | 18.01 | 17.11          | 17.83 | 17.60 | 18.31 | 18.78 |
| 8H              | 4H   | 16.25            | 17.05 | 16.71 | 17.50 | 17.96 | 17.22          | 18.02 | 17.68 | 18.46 | 18.93 |
|                 | 6H   | 16.51            | 17.17 | 17.01 | 17.66 | 18.14 | 17.25          | 17.91 | 17.75 | 18.40 | 18.88 |
|                 | 8H   | 16.55            | 17.14 | 17.06 | 17.65 | 18.14 | 17.23          | 17.82 | 17.74 | 18.33 | 18.81 |
|                 | 12H  | 16.57            | 17.09 | 17.08 | 17.58 | 18.15 | 17.21          | 17.73 | 17.72 | 18.22 | 18.79 |
| 12H             | 4H   | 16.23            | 16.95 | 16.71 | 17.43 | 17.90 | 17.21          | 17.92 | 17.69 | 18.40 | 18.87 |
|                 | 6H   | 16.48            | 17.07 | 16.99 | 17.58 | 18.07 | 17.23          | 17.82 | 17.74 | 18.33 | 18.81 |
|                 | 8H   | 16.55            | 17.07 | 17.06 | 17.56 | 18.12 | 17.22          | 17.74 | 17.73 | 18.24 | 18.80 |