

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: P1499650

Luminaire Tested: MAE-G-4-120-3LO-STD-50-90-VRDCPH

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1499650  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P189188)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/26/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: MAE-G-4-120-3LO-STD-50-90-VRDCPH  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 3 LO ambient , STD exam illumination levels  
Light Source: -  
Ballast/Driver: -

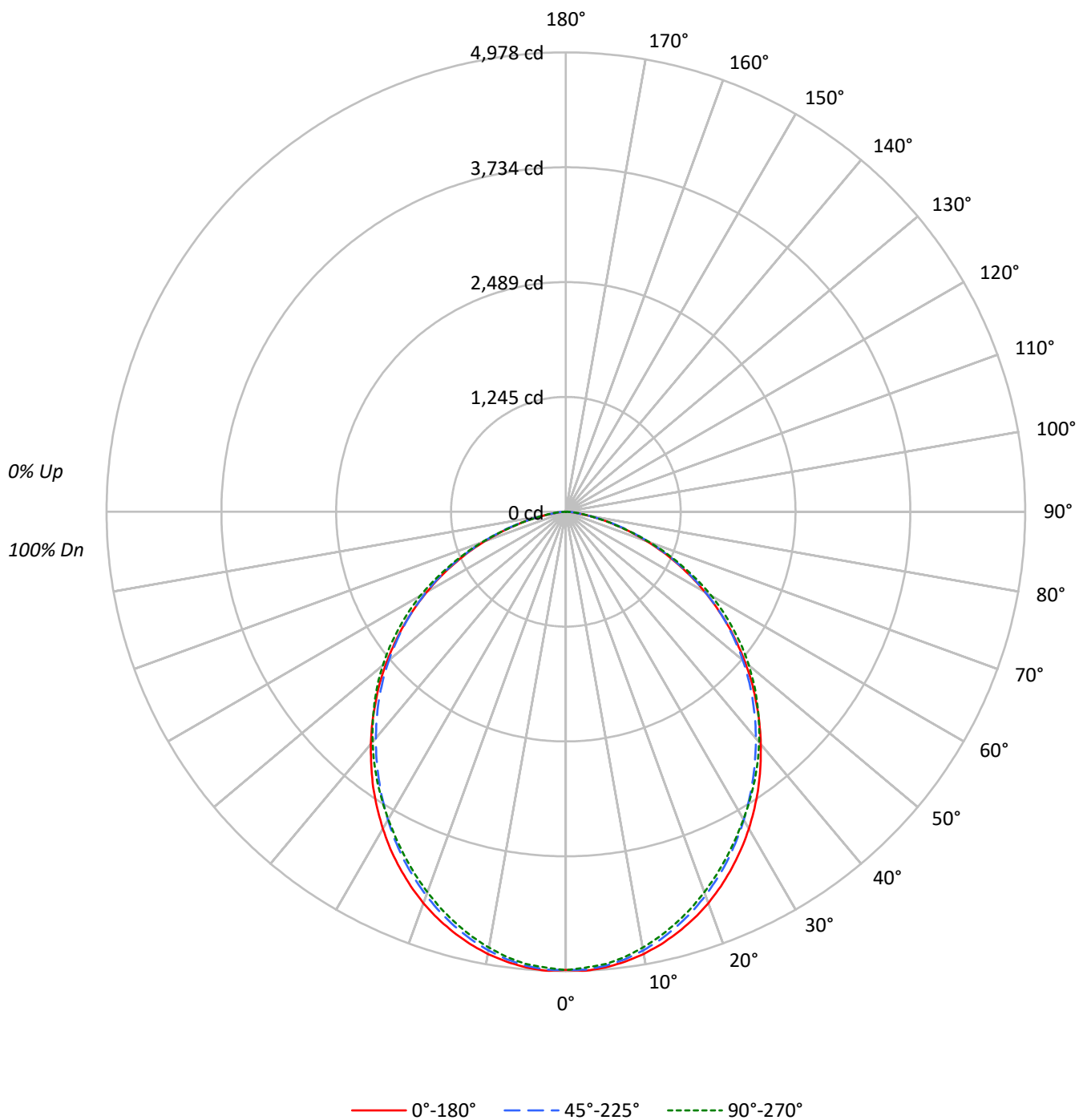
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12149.0 lumens  
Efficiency: N/A  
Efficacy: 86.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 140.5  
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: P1499650

CATALOG NUMBER: MAE-G-4-120-3LO-STD-50-90-VRDCPH

### Luminous Intensity Polar Plot



TEST NUMBER: P1499650

CATALOG NUMBER: MAE-G-4-120-3LO-STD-50-90-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 | 105 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  | 95  | 92  | 90  | 91  | 89  | 88  | 85  |    |    |
| 2   | 100 | 92  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 77  | 74  | 72  |    |    |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  | 74  | 69  | 65  | 72  | 67  | 64  | 61  |    |    |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 56  | 66  | 61  | 56  | 64  | 59  | 55  | 53  |    |    |
| 5   | 78  | 65  | 56  | 50  | 75  | 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  | 54  | 48  | 43  | 53  | 47  | 42  | 40  |    |    |
| 7   | 67  | 53  | 45  | 39  | 65  | 53  | 44  | 39  | 51  | 44  | 38  | 50  | 43  | 38  | 48  | 42  | 38  | 36  |    |    |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 40  | 35  | 47  | 40  | 34  | 46  | 39  | 34  | 44  | 38  | 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°  | 6682 | 6682 | 6682 |
| 5°  | 6694 | 6671 | 6645 |
| 10° | 6648 | 6595 | 6553 |
| 15° | 6568 | 6478 | 6427 |
| 20° | 6462 | 6336 | 6282 |
| 25° | 6322 | 6173 | 6125 |
| 30° | 6162 | 5991 | 5979 |
| 35° | 5980 | 5806 | 5854 |
| 40° | 5774 | 5626 | 5724 |
| 45° | 5550 | 5443 | 5582 |
| 50° | 5306 | 5240 | 5418 |
| 55° | 5029 | 5005 | 5192 |
| 60° | 4687 | 4709 | 4906 |
| 65° | 4263 | 4317 | 4429 |
| 70° | 3678 | 3778 | 3796 |
| 75° | 2928 | 3049 | 2932 |
| 80° | 1982 | 2077 | 2026 |
| 85° | 1031 | 1369 | 1714 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5582 cd/sqm

TEST NUMBER: P1499650

CATALOG NUMBER: MAE-G-4-120-3LO-STD-50-90-VRDCPH

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 467.3   | 3.8       |
| 10°-20°   | 1310.3  | 10.8      |
| 20°-30°   | 1919.4  | 15.8      |
| 30°-40°   | 2229.1  | 18.3      |
| 40°-50°   | 2228.7  | 18.3      |
| 50°-60°   | 1922.6  | 15.8      |
| 60°-70°   | 1342.7  | 11.1      |
| 70°-80°   | 615.9   | 5.1       |
| 80°-90°   | 113.0   | 0.9       |
| 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°    | 3697.0  | 30.4      |
| 0°-40°    | 5926.1  | 48.8      |
| 0°-60°    | 10077.4 | 82.9      |
| 0°-90°    | 12149.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 12149.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 4966 | 4966  | 4966 | 4966  | 4966 |      |
| 5°  | 4956 | 4937  | 4939 | 4913  | 4920 | 470  |
| 15° | 4715 | 4683  | 4651 | 4608  | 4614 | 1329 |
| 25° | 4258 | 4213  | 4158 | 4113  | 4126 | 1961 |
| 35° | 3641 | 3583  | 3535 | 3536  | 3564 | 2275 |
| 45° | 2917 | 2870  | 2861 | 2903  | 2934 | 2250 |
| 55° | 2144 | 2107  | 2134 | 2192  | 2214 | 1914 |
| 65° | 1339 | 1323  | 1356 | 1384  | 1391 | 1323 |
| 75° | 563  | 562   | 586  | 576   | 564  | 605  |
| 85° | 67   | 74    | 89   | 104   | 111  | 98   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1499650

CATALOG NUMBER: MAE-G-4-120-3LO-STD-50-90-VRDCPH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 4966.3 | 4966.3 | 4966.3 | 4966.3 | 4966.3 |
| 2.5°  | 4978.1 | 4960.1 | 4966.3 | 4945.7 | 4944.0 |
| 5°    | 4956.0 | 4936.6 | 4939.1 | 4912.7 | 4919.9 |
| 7.5°  | 4917.7 | 4896.1 | 4891.5 | 4861.7 | 4867.9 |
| 10°   | 4865.7 | 4839.6 | 4827.4 | 4792.4 | 4796.7 |
| 12.5° | 4796.7 | 4768.5 | 4747.1 | 4706.4 | 4713.2 |
| 15°   | 4715.3 | 4683.2 | 4650.8 | 4608.5 | 4614.2 |
| 17.5° | 4621.0 | 4584.6 | 4544.9 | 4496.6 | 4506.7 |
| 20°   | 4512.9 | 4472.6 | 4425.3 | 4374.5 | 4387.1 |
| 22.5° | 4391.8 | 4348.0 | 4294.9 | 4247.4 | 4259.1 |
| 25°   | 4258.4 | 4212.6 | 4158.2 | 4113.3 | 4125.7 |
| 27.5° | 4118.0 | 4066.8 | 4010.4 | 3974.0 | 3987.9 |
| 30°   | 3966.1 | 3912.3 | 3855.8 | 3827.9 | 3848.5 |
| 32.5° | 3805.7 | 3751.2 | 3698.0 | 3684.0 | 3708.2 |
| 35°   | 3640.6 | 3582.8 | 3534.7 | 3535.5 | 3564.0 |
| 37.5° | 3463.4 | 3412.3 | 3370.8 | 3386.0 | 3414.9 |
| 40°   | 3287.4 | 3234.3 | 3203.2 | 3228.2 | 3259.0 |
| 42.5° | 3105.2 | 3056.3 | 3033.9 | 3070.1 | 3098.3 |
| 45°   | 2916.9 | 2870.0 | 2860.7 | 2902.6 | 2933.5 |
| 47.5° | 2731.1 | 2684.0 | 2685.0 | 2732.3 | 2766.4 |
| 50°   | 2534.8 | 2493.4 | 2503.1 | 2558.2 | 2588.3 |
| 52.5° | 2338.2 | 2298.9 | 2319.5 | 2378.6 | 2408.6 |
| 55°   | 2143.9 | 2106.6 | 2133.8 | 2191.8 | 2213.5 |
| 57.5° | 1942.4 | 1915.5 | 1945.7 | 1997.9 | 2021.4 |
| 60°   | 1741.8 | 1717.2 | 1749.9 | 1800.7 | 1823.2 |
| 62.5° | 1540.8 | 1521.3 | 1554.6 | 1598.6 | 1608.3 |
| 65°   | 1338.9 | 1322.6 | 1356.0 | 1384.4 | 1391.2 |
| 67.5° | 1134.4 | 1125.1 | 1158.8 | 1178.4 | 1180.4 |
| 70°   | 934.9  | 924.2  | 960.3  | 971.7  | 965.0  |
| 72.5° | 741.0  | 737.5  | 765.6  | 769.1  | 756.3  |
| 75°   | 563.3  | 562.0  | 586.5  | 575.7  | 564.0  |
| 77.5° | 398.4  | 399.1  | 416.0  | 402.8  | 397.0  |
| 80°   | 255.8  | 263.3  | 268.1  | 265.6  | 261.5  |
| 82.5° | 143.8  | 153.1  | 157.0  | 173.1  | 180.0  |
| 85°   | 66.8   | 73.6   | 88.7   | 104.2  | 111.0  |
| 87.5° | 22.7   | 28.2   | 36.7   | 39.6   | 37.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1499650

CATALOG NUMBER: MAE-G-4-120-3LO-STD-50-90-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 | 17.53            | 19.12 | 17.90 | 19.43 | 19.74 | 17.82          | 19.41 | 18.19 | 19.72 | 20.04 |
|                 | 3H   | 18.99            | 20.41 | 19.36 | 20.74 | 21.10 | 19.28          | 20.70 | 19.66 | 21.03 | 21.39 |
|                 | 4H   | 19.41            | 20.75 | 19.81 | 21.10 | 21.47 | 19.68          | 21.02 | 20.08 | 21.37 | 21.74 |
|                 | 6H   | 19.62            | 20.85 | 20.03 | 21.22 | 21.61 | 19.87          | 21.11 | 20.28 | 21.47 | 21.86 |
|                 | 8H   | 19.64            | 20.82 | 20.07 | 21.21 | 21.61 | 19.91          | 21.09 | 20.33 | 21.48 | 21.88 |
|                 | 12H  | 19.64            | 20.77 | 20.07 | 21.15 | 21.58 | 19.93          | 21.06 | 20.36 | 21.44 | 21.87 |
| 4H              | 2H   | 18.10            | 19.44 | 18.50 | 19.79 | 20.17 | 18.34          | 19.68 | 18.74 | 20.03 | 20.40 |
|                 | 3H   | 19.73            | 20.85 | 20.14 | 21.25 | 21.65 | 19.98          | 21.10 | 20.39 | 21.49 | 21.89 |
|                 | 4H   | 20.24            | 21.24 | 20.67 | 21.66 | 22.10 | 20.47          | 21.48 | 20.91 | 21.89 | 22.33 |
|                 | 6H   | 20.52            | 21.40 | 20.98 | 21.84 | 22.30 | 20.74          | 21.61 | 21.19 | 22.05 | 22.51 |
|                 | 8H   | 20.57            | 21.38 | 21.03 | 21.82 | 22.29 | 20.80          | 21.61 | 21.26 | 22.06 | 22.52 |
|                 | 12H  | 20.58            | 21.31 | 21.06 | 21.78 | 22.26 | 20.84          | 21.57 | 21.32 | 22.05 | 22.52 |
| 8H              | 4H   | 20.43            | 21.25 | 20.90 | 21.69 | 22.16 | 20.64          | 21.46 | 21.11 | 21.90 | 22.37 |
|                 | 6H   | 20.77            | 21.44 | 21.27 | 21.93 | 22.41 | 20.96          | 21.63 | 21.46 | 22.12 | 22.60 |
|                 | 8H   | 20.84            | 21.44 | 21.35 | 21.95 | 22.44 | 21.06          | 21.66 | 21.57 | 22.16 | 22.65 |
|                 | 12H  | 20.87            | 21.41 | 21.38 | 21.90 | 22.46 | 21.14          | 21.67 | 21.65 | 22.16 | 22.72 |
| 12H             | 4H   | 20.43            | 21.16 | 20.91 | 21.64 | 22.11 | 20.64          | 21.37 | 21.12 | 21.84 | 22.31 |
|                 | 6H   | 20.77            | 21.37 | 21.28 | 21.88 | 22.37 | 20.96          | 21.56 | 21.47 | 22.07 | 22.56 |
|                 | 8H   | 20.87            | 21.40 | 21.38 | 21.89 | 22.46 | 21.09          | 21.62 | 21.59 | 22.11 | 22.67 |