

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: P1499487

Luminaire Tested: MAE-G-4-120-3HI-50

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1499487  
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-4-120-3HI-50  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 3 HI ambient illumination levels  
Light Source: -  
Ballast/Driver: -

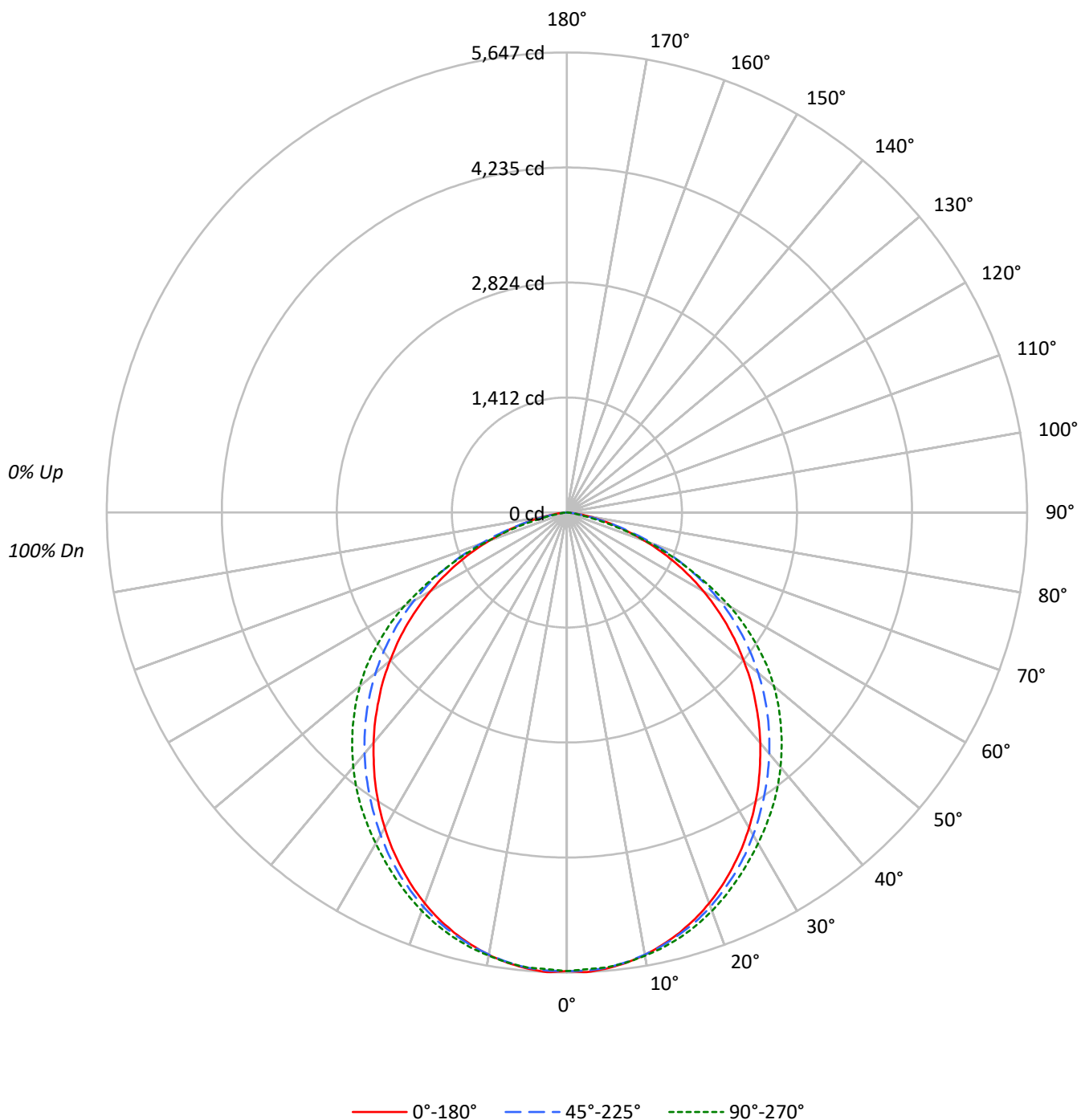
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14267.0 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 132.9  
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: P1499487

CATALOG NUMBER: MAE-G-4-120-3HI-50

### Luminous Intensity Polar Plot



TEST NUMBER: P1499487

CATALOG NUMBER: MAE-G-4-120-3HI-50

**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   | 110 | 105 | 102 | 98  | 107 | 103 | 100 | 96  | 99  | 96  | 93  |  | 95  | 93  | 91  |  | 92  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  |  | 84  | 80  | 76  |  | 81  |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  |  | 75  | 69  | 65  |  | 72  |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 64  | 57  | 69  | 62  | 57  |  | 67  | 61  | 56  |  | 65  |
| 5   | 78  | 65  | 56  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 49  |  | 60  | 54  | 49  |  | 58  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  |  | 54  | 48  | 43  |  | 53  |
| 7   | 67  | 53  | 45  | 39  | 65  | 53  | 44  | 39  | 51  | 44  | 38  |  | 50  | 43  | 38  |  | 48  |
| 8   | 62  | 49  | 40  | 35  | 60  | 48  | 40  | 35  | 47  | 40  | 34  |  | 46  | 39  | 34  |  | 44  |
| 9   | 58  | 45  | 37  | 31  | 57  | 44  | 36  | 31  | 43  | 36  | 31  |  | 42  | 36  | 31  |  | 41  |
| 10  | 54  | 41  | 34  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7574 | 7574 | 7574 |
| 5°  | 7590 | 7574 | 7571 |
| 10° | 7534 | 7531 | 7549 |
| 15° | 7438 | 7462 | 7517 |
| 20° | 7309 | 7376 | 7452 |
| 25° | 7139 | 7253 | 7367 |
| 30° | 6946 | 7104 | 7290 |
| 35° | 6728 | 6942 | 7234 |
| 40° | 6483 | 6785 | 7162 |
| 45° | 6219 | 6617 | 7070 |
| 50° | 5930 | 6413 | 6945 |
| 55° | 5612 | 6164 | 6677 |
| 60° | 5208 | 5824 | 6231 |
| 65° | 4703 | 5312 | 5337 |
| 70° | 4014 | 4460 | 4148 |
| 75° | 3152 | 3254 | 2551 |
| 80° | 2057 | 1674 | 987  |
| 85° | 986  | 662  | 523  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7070 cd/sqm

TEST NUMBER: P1499487

CATALOG NUMBER: MAE-G-4-120-3HI-50

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 531.7   | 3.7       |
| 10°-20°   | 1509.6  | 10.6      |
| 20°-30°   | 2245.1  | 15.7      |
| 30°-40°   | 2645.6  | 18.5      |
| 40°-50°   | 2682.4  | 18.8      |
| 50°-60°   | 2337.4  | 16.4      |
| 60°-70°   | 1598.5  | 11.2      |
| 70°-80°   | 642.1   | 4.5       |
| 80°-90°   | 74.5    | 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°    | 4286.4  | 30.0      |
| 0°-40°    | 6932.1  | 48.6      |
| 0°-60°    | 11951.8 | 83.8      |
| 0°-90°    | 14267.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 14267.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 5629 | 5629  | 5629 | 5629  | 5629 |      |
| 5°  | 5620 | 5586  | 5608 | 5602  | 5606 | 533  |
| 15° | 5340 | 5317  | 5357 | 5379  | 5396 | 1505 |
| 25° | 4809 | 4810  | 4886 | 4921  | 4963 | 2214 |
| 35° | 4096 | 4114  | 4226 | 4330  | 4404 | 2559 |
| 45° | 3268 | 3312  | 3478 | 3634  | 3716 | 2523 |
| 55° | 2392 | 2443  | 2628 | 2793  | 2846 | 2136 |
| 65° | 1477 | 1544  | 1668 | 1681  | 1676 | 1461 |
| 75° | 606  | 647   | 626  | 538   | 491  | 651  |
| 85° | 64   | 57    | 43   | 38    | 34   | 98   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1499487

CATALOG NUMBER: MAE-G-4-120-3HI-50

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 5629.1 | 5629.1 | 5629.1 | 5629.1 | 5629.1 |
| 2.5°  | 5647.2 | 5609.5 | 5629.1 | 5625.1 | 5610.7 |
| 5°    | 5619.9 | 5585.9 | 5608.1 | 5601.8 | 5605.5 |
| 7.5°  | 5575.6 | 5544.5 | 5567.8 | 5566.7 | 5573.0 |
| 10°   | 5514.6 | 5483.2 | 5512.0 | 5517.2 | 5525.0 |
| 12.5° | 5433.8 | 5407.9 | 5443.0 | 5453.3 | 5468.9 |
| 15°   | 5340.0 | 5316.7 | 5357.0 | 5379.1 | 5396.1 |
| 17.5° | 5230.7 | 5211.1 | 5263.2 | 5284.2 | 5307.5 |
| 20°   | 5104.4 | 5090.3 | 5151.3 | 5170.8 | 5204.8 |
| 22.5° | 4964.0 | 4956.2 | 5019.8 | 5049.7 | 5088.8 |
| 25°   | 4808.9 | 4810.4 | 4885.8 | 4921.1 | 4962.6 |
| 27.5° | 4646.4 | 4649.0 | 4735.0 | 4784.2 | 4828.5 |
| 30°   | 4470.7 | 4478.4 | 4572.2 | 4633.5 | 4691.9 |
| 32.5° | 4284.5 | 4300.1 | 4401.6 | 4485.0 | 4550.0 |
| 35°   | 4095.8 | 4113.9 | 4226.1 | 4330.0 | 4404.2 |
| 37.5° | 3891.6 | 3921.5 | 4047.8 | 4171.5 | 4248.0 |
| 40°   | 3691.1 | 3721.0 | 3862.8 | 3999.5 | 4077.7 |
| 42.5° | 3484.2 | 3521.9 | 3672.9 | 3825.1 | 3900.5 |
| 45°   | 3268.2 | 3312.2 | 3477.6 | 3633.8 | 3715.8 |
| 47.5° | 3061.1 | 3100.2 | 3274.5 | 3437.3 | 3521.9 |
| 50°   | 2833.2 | 2882.7 | 3063.7 | 3234.3 | 3317.7 |
| 52.5° | 2616.1 | 2661.5 | 2847.6 | 3022.2 | 3097.6 |
| 55°   | 2392.2 | 2442.9 | 2627.8 | 2793.0 | 2846.5 |
| 57.5° | 2163.0 | 2224.3 | 2402.6 | 2540.7 | 2591.3 |
| 60°   | 1935.4 | 1996.4 | 2164.4 | 2277.8 | 2315.4 |
| 62.5° | 1708.7 | 1774.0 | 1921.0 | 1996.4 | 1996.4 |
| 65°   | 1477.2 | 1543.6 | 1668.5 | 1681.4 | 1676.2 |
| 67.5° | 1245.6 | 1312.1 | 1407.0 | 1383.4 | 1367.9 |
| 70°   | 1020.4 | 1077.6 | 1133.7 | 1090.5 | 1054.3 |
| 72.5° | 801.7  | 856.4  | 865.6  | 803.2  | 757.4  |
| 75°   | 606.4  | 647.0  | 626.0  | 537.7  | 490.8  |
| 77.5° | 422.9  | 446.5  | 402.2  | 312.4  | 274.7  |
| 80°   | 265.5  | 275.9  | 216.0  | 152.2  | 127.4  |
| 82.5° | 143.3  | 144.4  | 93.8   | 76.8   | 71.6   |
| 85°   | 63.9   | 57.2   | 42.9   | 37.7   | 33.9   |
| 87.5° | 22.2   | 19.6   | 15.5   | 14.4   | 11.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1499487

CATALOG NUMBER: MAE-G-4-120-3HI-50

**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 | 17.96            | 19.54 | 18.33 | 19.86 | 20.17 | 18.94          | 20.53 | 19.31 | 20.84 | 21.16 |
|                 | 3H   | 19.37            | 20.79 | 19.75 | 21.12 | 21.48 | 20.15          | 21.57 | 20.53 | 21.90 | 22.26 |
|                 | 4H   | 19.76            | 21.10 | 20.16 | 21.45 | 21.82 | 20.37          | 21.70 | 20.76 | 22.05 | 22.42 |
|                 | 6H   | 19.94            | 21.17 | 20.35 | 21.54 | 21.93 | 20.38          | 21.61 | 20.79 | 21.98 | 22.37 |
|                 | 8H   | 19.95            | 21.13 | 20.38 | 21.52 | 21.92 | 20.36          | 21.53 | 20.78 | 21.92 | 22.32 |
|                 | 12H  | 19.95            | 21.07 | 20.37 | 21.45 | 21.88 | 20.33          | 21.46 | 20.76 | 21.84 | 22.27 |
| 4H              | 2H   | 18.63            | 19.97 | 19.03 | 20.31 | 20.69 | 19.42          | 20.76 | 19.82 | 21.10 | 21.48 |
|                 | 3H   | 20.20            | 21.31 | 20.61 | 21.70 | 22.11 | 20.79          | 21.90 | 21.20 | 22.30 | 22.70 |
|                 | 4H   | 20.68            | 21.67 | 21.11 | 22.08 | 22.52 | 21.06          | 22.06 | 21.50 | 22.47 | 22.91 |
|                 | 6H   | 20.92            | 21.78 | 21.37 | 22.22 | 22.68 | 21.12          | 21.98 | 21.57 | 22.42 | 22.88 |
|                 | 8H   | 20.94            | 21.74 | 21.40 | 22.19 | 22.65 | 21.09          | 21.90 | 21.55 | 22.34 | 22.81 |
|                 | 12H  | 20.94            | 21.66 | 21.42 | 22.14 | 22.61 | 21.07          | 21.79 | 21.55 | 22.27 | 22.74 |
| 8H              | 4H   | 20.82            | 21.63 | 21.28 | 22.07 | 22.54 | 21.18          | 21.99 | 21.64 | 22.43 | 22.90 |
|                 | 6H   | 21.10            | 21.76 | 21.59 | 22.25 | 22.73 | 21.24          | 21.90 | 21.74 | 22.39 | 22.87 |
|                 | 8H   | 21.14            | 21.73 | 21.65 | 22.24 | 22.73 | 21.22          | 21.81 | 21.73 | 22.32 | 22.81 |
|                 | 12H  | 21.15            | 21.67 | 21.66 | 22.17 | 22.73 | 21.21          | 21.73 | 21.71 | 22.22 | 22.78 |
| 12H             | 4H   | 20.80            | 21.52 | 21.29 | 22.00 | 22.47 | 21.17          | 21.89 | 21.65 | 22.37 | 22.84 |
|                 | 6H   | 21.07            | 21.66 | 21.58 | 22.17 | 22.66 | 21.22          | 21.81 | 21.73 | 22.32 | 22.81 |
|                 | 8H   | 21.13            | 21.65 | 21.64 | 22.15 | 22.71 | 21.22          | 21.74 | 21.73 | 22.23 | 22.80 |