

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: P1498947

Luminaire Tested: MAE-G-4-120-1HI-LO-35

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1498947  
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-LO-35  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 1 HI ambient , LO exam illumination levels  
Light Source: -  
Ballast/Driver: -

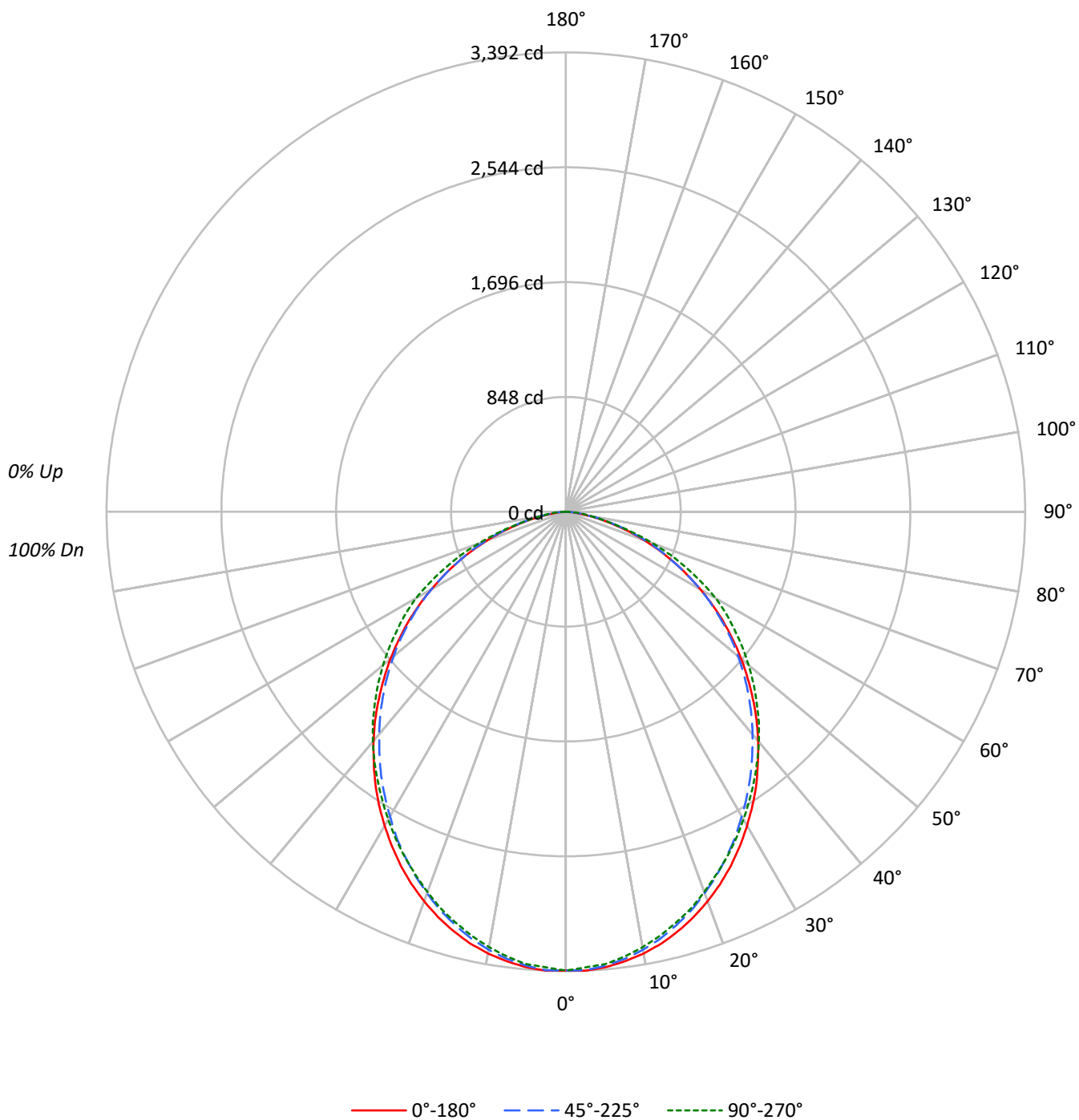
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8197.0 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 92.5  
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

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CATALOG NUMBER: MAE-G-4-120-1HI-LO-35

### 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  |
| 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 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  |
| 2   | 100 | 92  | 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  |  | 74  | 69  | 65  |  | 72  |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 57  |  | 67  | 61  | 56  |  | 64  |
| 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  | 45  | 39  | 51  | 44  | 39  |  | 50  | 43  | 38  |  | 48  |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 40  | 35  | 47  | 40  | 35  |  | 46  | 39  | 34  |  | 45  |
| 9   | 58  | 45  | 37  | 32  | 57  | 44  | 37  | 31  | 43  | 36  | 31  |  | 42  | 36  | 31  |  | 41  |
| 10  | 55  | 42  | 34  | 29  | 53  | 41  | 34  | 29  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4558 | 4558 | 4558 |
| 5°  | 4559 | 4543 | 4528 |
| 10° | 4524 | 4487 | 4459 |
| 15° | 4465 | 4400 | 4375 |
| 20° | 4382 | 4292 | 4278 |
| 25° | 4280 | 4172 | 4177 |
| 30° | 4158 | 4035 | 4075 |
| 35° | 4029 | 3906 | 3981 |
| 40° | 3881 | 3767 | 3894 |
| 45° | 3715 | 3628 | 3793 |
| 50° | 3540 | 3478 | 3688 |
| 55° | 3338 | 3297 | 3565 |
| 60° | 3087 | 3088 | 3442 |
| 65° | 2800 | 2802 | 3138 |
| 70° | 2422 | 2482 | 2701 |
| 75° | 1921 | 2044 | 2069 |
| 80° | 1316 | 1482 | 1499 |
| 85° | 729  | 1067 | 1326 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3793 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 318.4  | 3.9       |
| 10°-20°   | 891.3  | 10.9      |
| 20°-30°   | 1301.4 | 15.9      |
| 30°-40°   | 1505.0 | 18.4      |
| 40°-50°   | 1496.2 | 18.3      |
| 50°-60°   | 1285.3 | 15.7      |
| 60°-70°   | 899.1  | 11.0      |
| 70°-80°   | 417.2  | 5.1       |
| 80°-90°   | 83.0   | 1.0       |
| 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°    | 2511.1 | 30.6      |
| 0°-40°    | 4016.1 | 49.0      |
| 0°-60°    | 6797.6 | 82.9      |
| 0°-90°    | 8197.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 8197.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 3388 | 3388  | 3388 | 3388  | 3388 |      |
| 5°  | 3375 | 3372  | 3364 | 3345  | 3352 | 320  |
| 15° | 3205 | 3192  | 3158 | 3133  | 3141 | 903  |
| 25° | 2883 | 2853  | 2810 | 2798  | 2813 | 1327 |
| 35° | 2453 | 2414  | 2378 | 2396  | 2424 | 1532 |
| 45° | 1952 | 1921  | 1907 | 1959  | 1993 | 1506 |
| 55° | 1423 | 1394  | 1406 | 1475  | 1520 | 1270 |
| 65° | 880  | 858   | 880  | 954   | 986  | 871  |
| 75° | 370  | 361   | 393  | 405   | 398  | 400  |
| 85° | 47   | 56    | 69   | 82    | 86   | 67   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 3387.5 | 3387.5 | 3387.5 | 3387.5 | 3387.5 |
| 2.5°  | 3391.6 | 3393.8 | 3387.5 | 3364.4 | 3366.8 |
| 5°    | 3375.2 | 3371.9 | 3363.9 | 3345.3 | 3352.2 |
| 7.5°  | 3347.7 | 3344.1 | 3329.8 | 3308.8 | 3313.7 |
| 10°   | 3311.3 | 3304.0 | 3283.9 | 3258.3 | 3263.7 |
| 12.5° | 3264.4 | 3255.7 | 3228.0 | 3200.9 | 3207.4 |
| 15°   | 3205.2 | 3192.2 | 3158.5 | 3132.8 | 3140.6 |
| 17.5° | 3137.2 | 3124.3 | 3084.6 | 3057.4 | 3071.2 |
| 20°   | 3060.1 | 3041.7 | 2997.2 | 2973.9 | 2987.6 |
| 22.5° | 2976.0 | 2952.0 | 2907.0 | 2887.0 | 2900.5 |
| 25°   | 2883.3 | 2853.3 | 2810.1 | 2797.9 | 2813.4 |
| 27.5° | 2782.7 | 2750.6 | 2708.8 | 2700.2 | 2721.0 |
| 30°   | 2676.0 | 2642.1 | 2596.9 | 2600.4 | 2623.1 |
| 32.5° | 2567.1 | 2531.8 | 2488.5 | 2501.4 | 2524.1 |
| 35°   | 2452.8 | 2413.7 | 2377.9 | 2396.2 | 2423.7 |
| 37.5° | 2330.2 | 2293.9 | 2259.8 | 2294.6 | 2321.2 |
| 40°   | 2209.6 | 2171.7 | 2144.5 | 2186.7 | 2216.9 |
| 42.5° | 2084.2 | 2048.9 | 2027.3 | 2074.3 | 2109.1 |
| 45°   | 1952.5 | 1921.4 | 1906.6 | 1959.3 | 1993.2 |
| 47.5° | 1821.5 | 1789.7 | 1784.8 | 1841.5 | 1879.5 |
| 50°   | 1691.3 | 1662.2 | 1661.4 | 1723.6 | 1761.7 |
| 52.5° | 1556.0 | 1527.7 | 1536.3 | 1599.9 | 1644.1 |
| 55°   | 1422.9 | 1394.0 | 1405.5 | 1475.3 | 1519.9 |
| 57.5° | 1286.5 | 1266.5 | 1278.3 | 1352.6 | 1405.4 |
| 60°   | 1147.2 | 1126.7 | 1147.7 | 1232.1 | 1279.0 |
| 62.5° | 1012.5 | 991.5  | 1011.8 | 1102.3 | 1131.6 |
| 65°   | 879.5  | 857.9  | 880.1  | 953.6  | 985.6  |
| 67.5° | 749.6  | 728.3  | 758.8  | 822.9  | 842.1  |
| 70°   | 615.6  | 597.3  | 631.0  | 681.0  | 686.5  |
| 72.5° | 491.1  | 474.6  | 512.1  | 540.2  | 536.8  |
| 75°   | 369.6  | 361.0  | 393.2  | 405.1  | 397.9  |
| 77.5° | 263.8  | 259.2  | 284.7  | 287.4  | 280.8  |
| 80°   | 169.9  | 174.0  | 191.3  | 191.1  | 193.5  |
| 82.5° | 98.5   | 105.6  | 118.0  | 133.5  | 136.0  |
| 85°   | 47.2   | 55.7   | 69.1   | 81.5   | 85.9   |
| 87.5° | 16.5   | 22.2   | 28.3   | 31.2   | 30.4   |
| 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 | 16.03            | 17.61 | 16.39 | 17.92 | 18.24 | 16.52          | 18.10 | 16.89 | 18.42 | 18.73 |
|                 | 3H   | 17.45            | 18.87 | 17.83 | 19.20 | 19.56 | 18.07          | 19.49 | 18.45 | 19.82 | 20.18 |
|                 | 4H   | 17.87            | 19.20 | 18.26 | 19.55 | 19.93 | 18.49          | 19.83 | 18.89 | 20.18 | 20.55 |
|                 | 6H   | 18.07            | 19.31 | 18.48 | 19.67 | 20.07 | 18.70          | 19.93 | 19.11 | 20.30 | 20.69 |
|                 | 8H   | 18.10            | 19.28 | 18.53 | 19.67 | 20.07 | 18.75          | 19.93 | 19.17 | 20.32 | 20.72 |
|                 | 12H  | 18.11            | 19.23 | 18.54 | 19.61 | 20.04 | 18.78          | 19.91 | 19.21 | 20.29 | 20.72 |
| 4H              | 2H   | 16.57            | 17.91 | 16.97 | 18.26 | 18.63 | 16.98          | 18.32 | 17.38 | 18.66 | 19.04 |
|                 | 3H   | 18.18            | 19.29 | 18.59 | 19.69 | 20.09 | 18.73          | 19.84 | 19.14 | 20.24 | 20.64 |
|                 | 4H   | 18.67            | 19.68 | 19.11 | 20.09 | 20.53 | 19.25          | 20.25 | 19.68 | 20.66 | 21.10 |
|                 | 6H   | 18.96            | 19.83 | 19.41 | 20.27 | 20.73 | 19.54          | 20.41 | 19.99 | 20.85 | 21.31 |
|                 | 8H   | 19.01            | 19.82 | 19.47 | 20.26 | 20.73 | 19.61          | 20.43 | 20.08 | 20.87 | 21.34 |
|                 | 12H  | 19.03            | 19.75 | 19.51 | 20.23 | 20.70 | 19.68          | 20.40 | 20.16 | 20.88 | 21.35 |
| 8H              | 4H   | 18.88            | 19.70 | 19.35 | 20.14 | 20.61 | 19.40          | 20.22 | 19.87 | 20.66 | 21.13 |
|                 | 6H   | 19.23            | 19.90 | 19.72 | 20.39 | 20.87 | 19.76          | 20.43 | 20.25 | 20.92 | 21.39 |
|                 | 8H   | 19.31            | 19.91 | 19.82 | 20.41 | 20.90 | 19.87          | 20.48 | 20.39 | 20.98 | 21.47 |
|                 | 12H  | 19.35            | 19.88 | 19.86 | 20.37 | 20.94 | 19.98          | 20.51 | 20.49 | 21.00 | 21.57 |
| 12H             | 4H   | 18.89            | 19.62 | 19.37 | 20.09 | 20.56 | 19.40          | 20.13 | 19.88 | 20.60 | 21.07 |
|                 | 6H   | 19.24            | 19.84 | 19.75 | 20.35 | 20.83 | 19.75          | 20.36 | 20.27 | 20.87 | 21.35 |
|                 | 8H   | 19.35            | 19.88 | 19.86 | 20.37 | 20.94 | 19.91          | 20.44 | 20.42 | 20.93 | 21.50 |