

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: P1498029

Luminaire Tested: MAE-G-2-120-1HI-30

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1498029  
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-2-120-1HI-30  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, no door frame, 1 HI ambient illumination levels  
Light Source: -  
Ballast/Driver: -

**Summary**

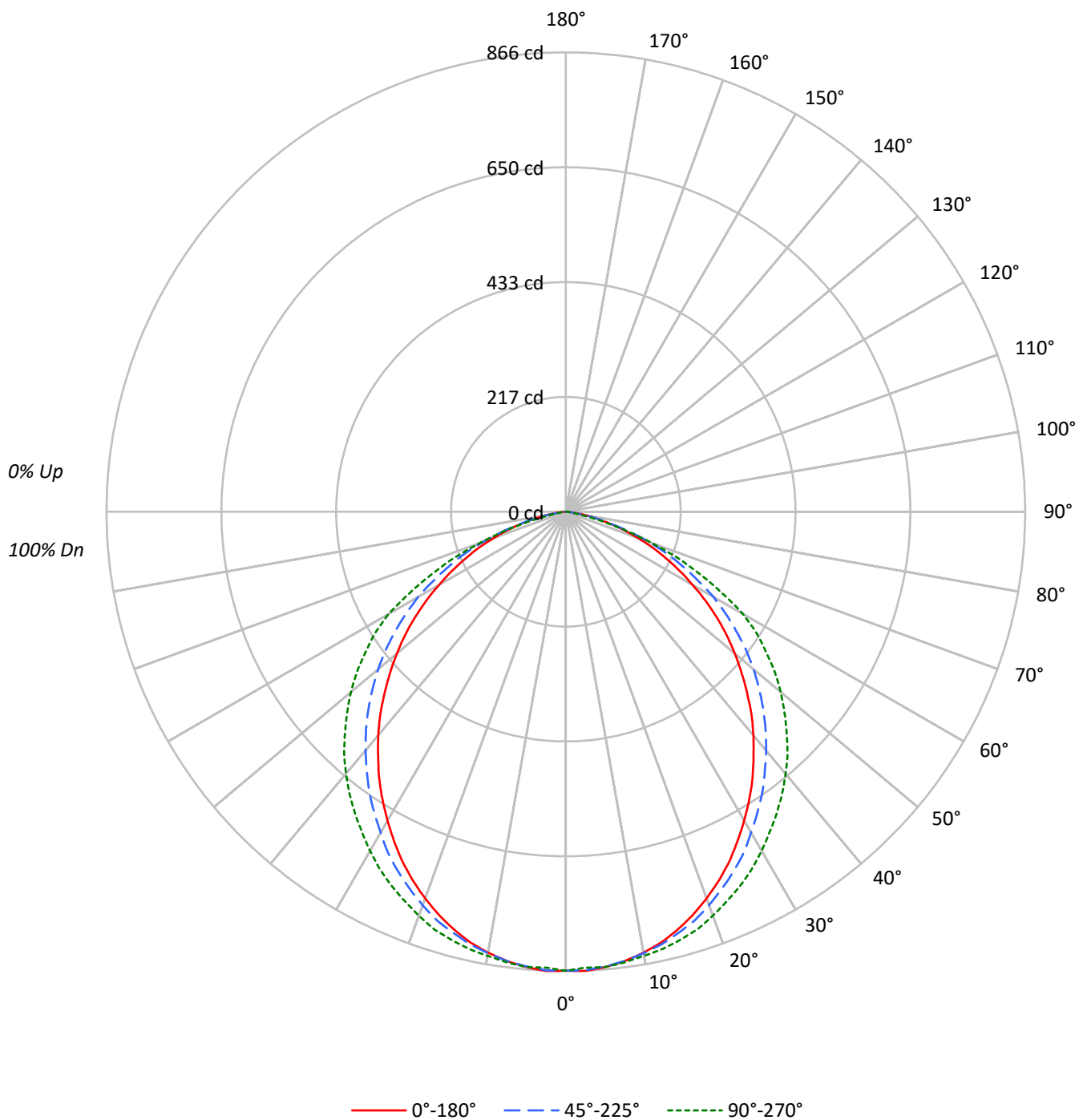
Lumens per Lamp: N/A  
Luminaire Lumens: 2178.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.27 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 22.6  
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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### 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 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  |  | 95  | 93  | 91  |  | 92  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  |  | 84  | 80  | 77  |  | 81  |
| 3   | 92  | 82  | 74  | 68  | 90  | 80  | 73  | 67  | 77  | 71  | 66  |  | 75  | 70  | 65  |  | 72  |
| 4   | 84  | 73  | 65  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  |  | 67  | 61  | 56  |  | 65  |
| 5   | 78  | 65  | 57  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 49  |  | 60  | 54  | 49  |  | 58  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  |  | 55  | 48  | 43  |  | 53  |
| 7   | 67  | 54  | 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  | 31  | 57  | 44  | 37  | 31  | 43  | 36  | 31  |  | 42  | 36  | 31  |  | 41  |
| 10  | 54  | 41  | 34  | 29  | 53  | 41  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2328 | 2328 | 2328 |
| 5°  | 2327 | 2323 | 2327 |
| 10° | 2306 | 2310 | 2323 |
| 15° | 2271 | 2289 | 2327 |
| 20° | 2221 | 2260 | 2320 |
| 25° | 2162 | 2221 | 2310 |
| 30° | 2089 | 2170 | 2294 |
| 35° | 2016 | 2122 | 2278 |
| 40° | 1933 | 2064 | 2265 |
| 45° | 1838 | 2004 | 2241 |
| 50° | 1741 | 1933 | 2215 |
| 55° | 1629 | 1840 | 2161 |
| 60° | 1487 | 1729 | 2077 |
| 65° | 1331 | 1545 | 1784 |
| 70° | 1136 | 1303 | 1361 |
| 75° | 880  | 945  | 763  |
| 80° | 578  | 502  | 270  |
| 85° | 309  | 232  | 154  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2241 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 81.7   | 3.8       |
| 10°-20°   | 232.2  | 10.7      |
| 20°-30°   | 345.2  | 15.9      |
| 30°-40°   | 405.9  | 18.6      |
| 40°-50°   | 409.7  | 18.8      |
| 50°-60°   | 355.7  | 16.3      |
| 60°-70°   | 242.1  | 11.1      |
| 70°-80°   | 94.3   | 4.3       |
| 80°-90°   | 11.3   | 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       |
| <hr/>     |        |           |
| 0°-30°    | 659.1  | 30.3      |
| 0°-40°    | 1065.0 | 48.9      |
| 0°-60°    | 1830.3 | 84.0      |
| 0°-90°    | 2178.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2178.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 865 | 865   | 865 | 865   | 865 |      |
| 5°  | 861 | 860   | 860 | 860   | 861 | 82   |
| 15° | 815 | 817   | 822 | 830   | 835 | 230  |
| 25° | 728 | 732   | 748 | 767   | 778 | 335  |
| 35° | 614 | 621   | 646 | 676   | 693 | 383  |
| 45° | 483 | 495   | 526 | 568   | 589 | 373  |
| 55° | 347 | 358   | 392 | 437   | 461 | 310  |
| 65° | 209 | 219   | 243 | 269   | 280 | 208  |
| 75° | 85  | 90    | 91  | 82    | 73  | 92   |
| 85° | 10  | 10    | 8   | 6     | 5   | 15   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 865.1 | 865.1 | 865.1 | 865.1 | 865.1 |
| 2.5°  | 866.4 | 866.4 | 865.1 | 861.4 | 860.1 |
| 5°    | 861.4 | 860.1 | 860.1 | 860.1 | 861.4 |
| 7.5°  | 853.9 | 853.9 | 853.9 | 855.2 | 856.4 |
| 10°   | 844.0 | 844.0 | 845.2 | 847.7 | 850.2 |
| 12.5° | 831.5 | 832.8 | 835.2 | 840.2 | 844.0 |
| 15°   | 815.3 | 816.6 | 821.6 | 830.3 | 835.2 |
| 17.5° | 796.7 | 800.4 | 807.9 | 817.8 | 825.3 |
| 20°   | 775.5 | 779.2 | 789.2 | 801.6 | 810.3 |
| 22.5° | 753.1 | 756.8 | 769.3 | 784.2 | 794.2 |
| 25°   | 728.2 | 731.9 | 748.1 | 766.8 | 778.0 |
| 27.5° | 700.8 | 705.8 | 725.7 | 745.6 | 759.3 |
| 30°   | 672.2 | 678.4 | 698.3 | 723.2 | 738.2 |
| 32.5° | 643.5 | 651.0 | 672.2 | 700.8 | 715.7 |
| 35°   | 613.7 | 621.1 | 646.0 | 675.9 | 693.3 |
| 37.5° | 581.3 | 590.0 | 616.2 | 652.3 | 669.7 |
| 40°   | 550.2 | 558.9 | 587.5 | 626.1 | 644.8 |
| 42.5° | 517.8 | 527.8 | 557.7 | 597.5 | 618.7 |
| 45°   | 483.0 | 495.4 | 526.5 | 567.6 | 588.8 |
| 47.5° | 449.4 | 460.6 | 494.2 | 536.5 | 558.9 |
| 50°   | 415.8 | 428.2 | 461.8 | 505.4 | 529.0 |
| 52.5° | 382.1 | 393.3 | 428.2 | 471.8 | 496.7 |
| 55°   | 347.3 | 358.5 | 392.1 | 436.9 | 460.6 |
| 57.5° | 312.4 | 326.1 | 357.3 | 400.8 | 427.0 |
| 60°   | 276.3 | 288.8 | 321.2 | 364.7 | 385.9 |
| 62.5° | 242.7 | 253.9 | 281.3 | 322.4 | 332.4 |
| 65°   | 209.1 | 219.1 | 242.7 | 268.9 | 280.1 |
| 67.5° | 178.0 | 185.5 | 206.6 | 224.1 | 229.0 |
| 70°   | 144.4 | 151.9 | 165.6 | 175.5 | 173.0 |
| 72.5° | 114.5 | 119.5 | 128.2 | 127.0 | 120.7 |
| 75°   | 84.6  | 89.6  | 90.9  | 82.2  | 73.4  |
| 77.5° | 59.7  | 62.2  | 58.5  | 46.1  | 37.3  |
| 80°   | 37.3  | 38.6  | 32.4  | 19.9  | 17.4  |
| 82.5° | 21.2  | 21.2  | 14.9  | 12.4  | 10.0  |
| 85°   | 10.0  | 10.0  | 7.5   | 6.2   | 5.0   |
| 87.5° | 3.7   | 3.7   | 2.5   | 2.5   | 2.5   |
| 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 | 13.54            | 15.12 | 13.90 | 15.43 | 15.75 | 15.12          | 16.70 | 15.48 | 17.01 | 17.33 |
|                 | 3H   | 14.88            | 16.29 | 15.25 | 16.62 | 16.98 | 16.39          | 17.81 | 16.77 | 18.13 | 18.49 |
|                 | 4H   | 15.24            | 16.57 | 15.64 | 16.92 | 17.30 | 16.58          | 17.91 | 16.98 | 18.26 | 18.64 |
|                 | 6H   | 15.41            | 16.63 | 15.82 | 17.00 | 17.39 | 16.58          | 17.81 | 16.99 | 18.17 | 18.57 |
|                 | 8H   | 15.42            | 16.59 | 15.85 | 16.98 | 17.38 | 16.55          | 17.72 | 16.98 | 18.11 | 18.51 |
|                 | 12H  | 15.41            | 16.53 | 15.84 | 16.92 | 17.35 | 16.53          | 17.65 | 16.96 | 18.03 | 18.46 |
| 4H              | 2H   | 14.20            | 15.53 | 14.60 | 15.88 | 16.26 | 15.50          | 16.83 | 15.90 | 17.17 | 17.55 |
|                 | 3H   | 15.70            | 16.80 | 16.11 | 17.20 | 17.60 | 16.93          | 18.04 | 17.34 | 18.43 | 18.84 |
|                 | 4H   | 16.14            | 17.13 | 16.58 | 17.55 | 17.99 | 17.19          | 18.18 | 17.62 | 18.59 | 19.03 |
|                 | 6H   | 16.37            | 17.23 | 16.83 | 17.67 | 18.13 | 17.21          | 18.07 | 17.67 | 18.52 | 18.97 |
|                 | 8H   | 16.39            | 17.19 | 16.86 | 17.64 | 18.10 | 17.19          | 17.99 | 17.65 | 18.43 | 18.90 |
|                 | 12H  | 16.40            | 17.11 | 16.88 | 17.59 | 18.06 | 17.17          | 17.88 | 17.65 | 18.36 | 18.83 |
| 8H              | 4H   | 16.30            | 17.10 | 16.76 | 17.55 | 18.01 | 17.27          | 18.07 | 17.73 | 18.52 | 18.98 |
|                 | 6H   | 16.56            | 17.22 | 17.06 | 17.71 | 18.19 | 17.30          | 17.96 | 17.80 | 18.45 | 18.93 |
|                 | 8H   | 16.60            | 17.19 | 17.12 | 17.70 | 18.19 | 17.28          | 17.87 | 17.79 | 18.38 | 18.86 |
|                 | 12H  | 16.62            | 17.14 | 17.13 | 17.64 | 18.20 | 17.26          | 17.78 | 17.77 | 18.27 | 18.84 |
| 12H             | 4H   | 16.28            | 17.00 | 16.77 | 17.48 | 17.95 | 17.26          | 17.97 | 17.74 | 18.45 | 18.92 |
|                 | 6H   | 16.53            | 17.12 | 17.05 | 17.63 | 18.12 | 17.28          | 17.87 | 17.79 | 18.38 | 18.86 |
|                 | 8H   | 16.60            | 17.12 | 17.11 | 17.61 | 18.18 | 17.28          | 17.79 | 17.79 | 18.29 | 18.85 |