

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: P1498618

Luminaire Tested: MAE-G-2-120-3HI-50-90-VRDCPH

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1498618  
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-2-120-3HI-50-90-VRDCPH  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 3 HI ambient illumination levels  
Light Source: -  
Ballast/Driver: -

**Summary**

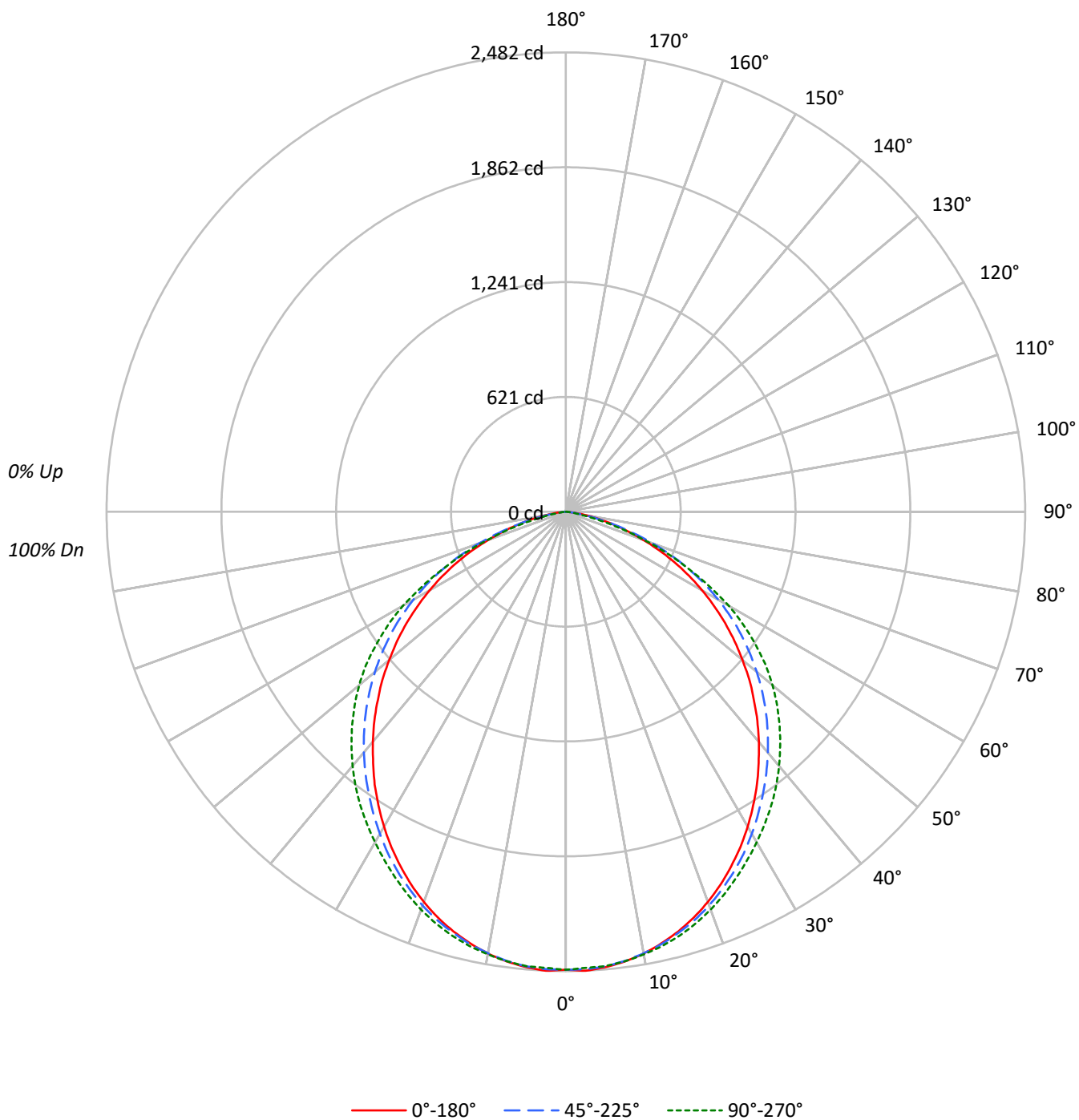
Lumens per Lamp: N/A  
Luminaire Lumens: 6271.0 lumens  
Efficiency: N/A  
Efficacy: 92.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 67.8  
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: P1498618

CATALOG NUMBER: MAE-G-2-120-3HI-50-90-VRDCPH

### Luminous Intensity Polar Plot



TEST NUMBER: P1498618

CATALOG NUMBER: MAE-G-2-120-3HI-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  |
| 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°  | 6658 | 6658 | 6658 |
| 5°  | 6673 | 6659 | 6656 |
| 10° | 6623 | 6620 | 6636 |
| 15° | 6539 | 6560 | 6608 |
| 20° | 6425 | 6484 | 6551 |
| 25° | 6276 | 6376 | 6477 |
| 30° | 6106 | 6245 | 6408 |
| 35° | 5914 | 6102 | 6359 |
| 40° | 5699 | 5964 | 6296 |
| 45° | 5467 | 5817 | 6216 |
| 50° | 5213 | 5637 | 6105 |
| 55° | 4933 | 5419 | 5870 |
| 60° | 4578 | 5120 | 5477 |
| 65° | 4134 | 4670 | 4691 |
| 70° | 3529 | 3921 | 3646 |
| 75° | 2771 | 2860 | 2243 |
| 80° | 1808 | 1472 | 868  |
| 85° | 868  | 580  | 460  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6216 cd/sqm

TEST NUMBER: P1498618

CATALOG NUMBER: MAE-G-2-120-3HI-50-90-VRDCPH

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 233.7  | 3.7       |
| 10°-20°   | 663.5  | 10.6      |
| 20°-30°   | 986.8  | 15.7      |
| 30°-40°   | 1162.9 | 18.5      |
| 40°-50°   | 1179.0 | 18.8      |
| 50°-60°   | 1027.4 | 16.4      |
| 60°-70°   | 702.6  | 11.2      |
| 70°-80°   | 282.2  | 4.5       |
| 80°-90°   | 32.7   | 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°    | 1884.1 | 30.0      |
| 0°-40°    | 3047.0 | 48.6      |
| 0°-60°    | 5253.4 | 83.8      |
| 0°-90°    | 6271.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6271.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2474 | 2474  | 2474 | 2474  | 2474 |      |
| 5°  | 2470 | 2455  | 2465 | 2462  | 2464 | 234  |
| 15° | 2347 | 2337  | 2355 | 2364  | 2372 | 661  |
| 25° | 2114 | 2114  | 2148 | 2163  | 2181 | 973  |
| 35° | 1800 | 1808  | 1858 | 1903  | 1936 | 1125 |
| 45° | 1436 | 1456  | 1529 | 1597  | 1633 | 1109 |
| 55° | 1052 | 1074  | 1155 | 1228  | 1251 | 939  |
| 65° | 649  | 678   | 733  | 739   | 737  | 642  |
| 75° | 266  | 284   | 275  | 236   | 216  | 286  |
| 85° | 28   | 25    | 19   | 17    | 15   | 43   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1498618

CATALOG NUMBER: MAE-G-2-120-3HI-50-90-VRDCPH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2474.2 | 2474.2 | 2474.2 | 2474.2 | 2474.2 |
| 2.5°  | 2482.2 | 2465.6 | 2474.2 | 2472.5 | 2466.2 |
| 5°    | 2470.2 | 2455.3 | 2465.0 | 2462.2 | 2463.9 |
| 7.5°  | 2450.7 | 2437.1 | 2447.3 | 2446.8 | 2449.6 |
| 10°   | 2423.9 | 2410.1 | 2422.8 | 2425.1 | 2428.5 |
| 12.5° | 2388.4 | 2377.0 | 2392.4 | 2397.0 | 2403.8 |
| 15°   | 2347.2 | 2336.9 | 2354.6 | 2364.4 | 2371.8 |
| 17.5° | 2299.1 | 2290.5 | 2313.4 | 2322.6 | 2332.9 |
| 20°   | 2243.6 | 2237.4 | 2264.2 | 2272.8 | 2287.7 |
| 22.5° | 2181.9 | 2178.5 | 2206.4 | 2219.6 | 2236.8 |
| 25°   | 2113.8 | 2114.4 | 2147.5 | 2163.1 | 2181.3 |
| 27.5° | 2042.3 | 2043.5 | 2081.3 | 2102.9 | 2122.4 |
| 30°   | 1965.1 | 1968.5 | 2009.7 | 2036.6 | 2062.3 |
| 32.5° | 1883.2 | 1890.1 | 1934.7 | 1971.4 | 2000.0 |
| 35°   | 1800.3 | 1808.3 | 1857.6 | 1903.2 | 1935.8 |
| 37.5° | 1710.5 | 1723.7 | 1779.2 | 1833.6 | 1867.2 |
| 40°   | 1622.4 | 1635.5 | 1697.9 | 1757.9 | 1792.3 |
| 42.5° | 1531.5 | 1548.0 | 1614.4 | 1681.3 | 1714.4 |
| 45°   | 1436.5 | 1455.9 | 1528.6 | 1597.2 | 1633.3 |
| 47.5° | 1345.5 | 1362.7 | 1439.3 | 1510.9 | 1548.0 |
| 50°   | 1245.3 | 1267.1 | 1346.6 | 1421.6 | 1458.3 |
| 52.5° | 1149.9 | 1169.9 | 1251.7 | 1328.4 | 1361.5 |
| 55°   | 1051.5 | 1073.8 | 1155.1 | 1227.6 | 1251.2 |
| 57.5° | 950.7  | 977.7  | 1056.1 | 1116.7 | 1139.0 |
| 60°   | 850.7  | 877.5  | 951.4  | 1001.2 | 1017.7 |
| 62.5° | 751.1  | 779.8  | 844.4  | 877.5  | 877.5  |
| 65°   | 649.3  | 678.5  | 733.4  | 739.1  | 736.8  |
| 67.5° | 547.5  | 576.7  | 618.4  | 608.1  | 601.2  |
| 70°   | 448.5  | 473.7  | 498.3  | 479.3  | 463.4  |
| 72.5° | 352.4  | 376.4  | 380.5  | 353.0  | 332.9  |
| 75°   | 266.5  | 284.4  | 275.1  | 236.3  | 215.7  |
| 77.5° | 185.9  | 196.2  | 176.8  | 137.3  | 120.8  |
| 80°   | 116.7  | 121.3  | 95.0   | 66.9   | 56.0   |
| 82.5° | 63.0   | 63.5   | 41.2   | 33.8   | 31.5   |
| 85°   | 28.1   | 25.2   | 18.8   | 16.6   | 14.9   |
| 87.5° | 9.7    | 8.6    | 6.8    | 6.3    | 5.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1498618

CATALOG NUMBER: MAE-G-2-120-3HI-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 | 17.51            | 19.10 | 17.88 | 19.41 | 19.73 | 18.50          | 20.08 | 18.86 | 20.39 | 20.71 |
|                 | 3H   | 18.92            | 20.34 | 19.30 | 20.67 | 21.03 | 19.70          | 21.12 | 20.08 | 21.45 | 21.81 |
|                 | 4H   | 19.32            | 20.65 | 19.72 | 21.00 | 21.38 | 19.92          | 21.25 | 20.32 | 21.60 | 21.98 |
|                 | 6H   | 19.49            | 20.72 | 19.90 | 21.09 | 21.48 | 19.93          | 21.17 | 20.35 | 21.53 | 21.92 |
|                 | 8H   | 19.51            | 20.68 | 19.93 | 21.07 | 21.47 | 19.91          | 21.09 | 20.34 | 21.47 | 21.87 |
|                 | 12H  | 19.50            | 20.62 | 19.93 | 21.00 | 21.43 | 19.89          | 21.01 | 20.32 | 21.39 | 21.82 |
| 4H              | 2H   | 18.18            | 19.52 | 18.58 | 19.87 | 20.24 | 18.97          | 20.31 | 19.37 | 20.66 | 21.03 |
|                 | 3H   | 19.75            | 20.86 | 20.16 | 21.26 | 21.66 | 20.34          | 21.45 | 20.75 | 21.85 | 22.25 |
|                 | 4H   | 20.23            | 21.22 | 20.66 | 21.64 | 22.07 | 20.62          | 21.61 | 21.05 | 22.02 | 22.46 |
|                 | 6H   | 20.47            | 21.33 | 20.92 | 21.77 | 22.23 | 20.67          | 21.53 | 21.12 | 21.97 | 22.43 |
|                 | 8H   | 20.49            | 21.30 | 20.95 | 21.74 | 22.21 | 20.64          | 21.45 | 21.11 | 21.89 | 22.36 |
|                 | 12H  | 20.49            | 21.21 | 20.97 | 21.69 | 22.16 | 20.62          | 21.34 | 21.10 | 21.82 | 22.29 |
| 8H              | 4H   | 20.37            | 21.18 | 20.84 | 21.62 | 22.09 | 20.73          | 21.54 | 21.20 | 21.98 | 22.45 |
|                 | 6H   | 20.65            | 21.31 | 21.15 | 21.80 | 22.28 | 20.79          | 21.46 | 21.29 | 21.95 | 22.42 |
|                 | 8H   | 20.69            | 21.28 | 21.20 | 21.79 | 22.28 | 20.77          | 21.36 | 21.28 | 21.87 | 22.36 |
|                 | 12H  | 20.70            | 21.23 | 21.21 | 21.72 | 22.28 | 20.76          | 21.28 | 21.27 | 21.77 | 22.33 |
| 12H             | 4H   | 20.36            | 21.08 | 20.84 | 21.55 | 22.02 | 20.72          | 21.44 | 21.20 | 21.92 | 22.39 |
|                 | 6H   | 20.62            | 21.21 | 21.13 | 21.72 | 22.21 | 20.77          | 21.36 | 21.28 | 21.87 | 22.36 |
|                 | 8H   | 20.69            | 21.21 | 21.19 | 21.70 | 22.26 | 20.77          | 21.29 | 21.28 | 21.79 | 22.35 |