

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: P1498402

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

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1498402  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P189185)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/26/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: MAE-G-2-120-2HI-STD-50-90-VRDCPH  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 2 HI ambient , STD exam illumination levels  
Light Source: -  
Ballast/Driver: -

**Summary**

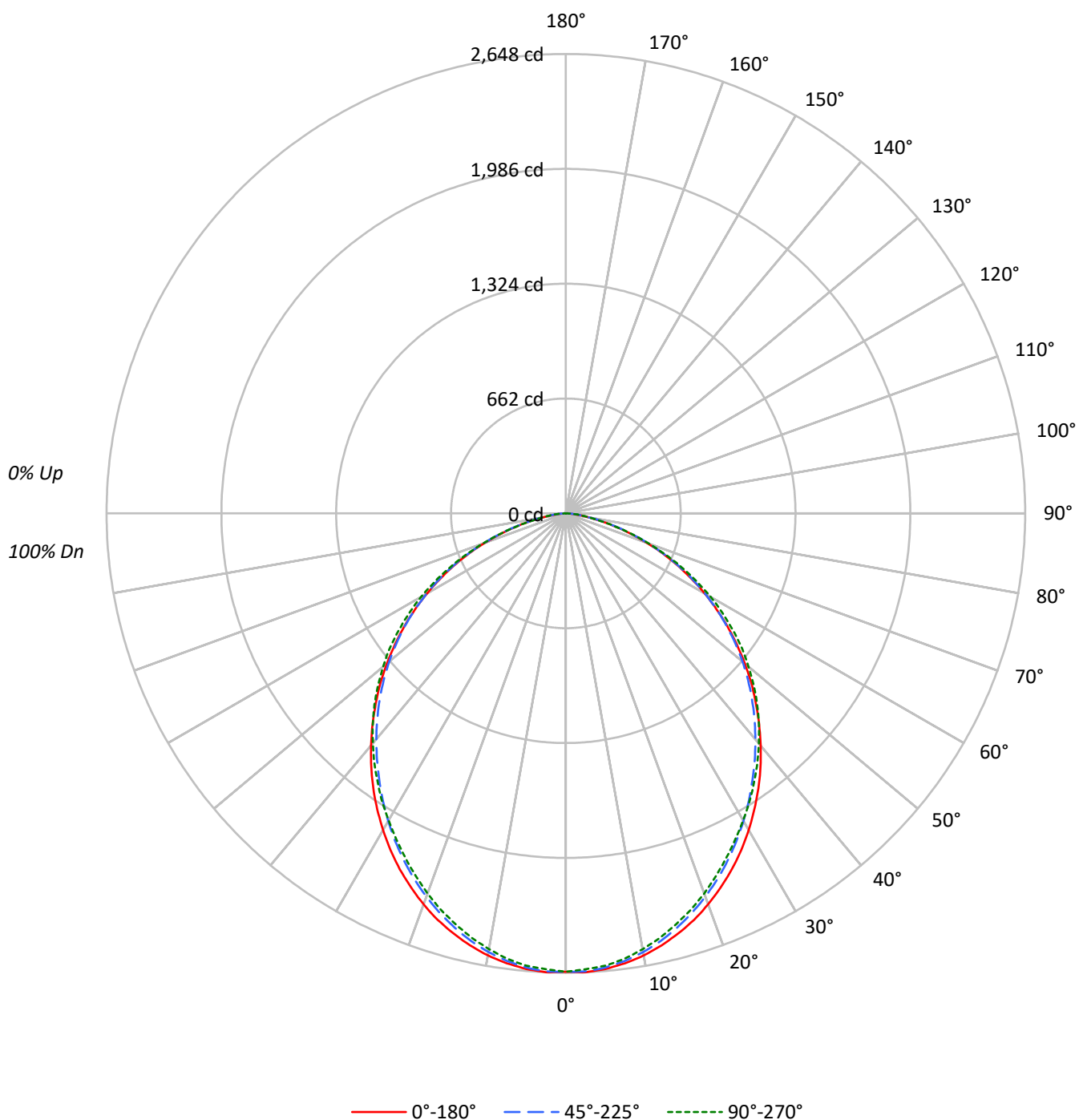
Lumens per Lamp: N/A  
Luminaire Lumens: 6449.0 lumens  
Efficiency: N/A  
Efficacy: 80.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 80  
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 | 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  | 75  | 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  | 38  |  | 50  | 43  | 38  |  | 48  |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 40  | 35  | 47  | 40  | 35  |  | 46  | 39  | 34  |  | 44  |
| 9   | 58  | 45  | 37  | 31  | 57  | 44  | 37  | 31  | 43  | 36  | 31  |  | 42  | 36  | 31  |  | 41  |
| 10  | 54  | 42  | 34  | 29  | 53  | 41  | 34  | 29  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7110 | 7110 | 7110 |
| 5°  | 7121 | 7098 | 7069 |
| 10° | 7070 | 7017 | 6969 |
| 15° | 6983 | 6890 | 6832 |
| 20° | 6869 | 6733 | 6676 |
| 25° | 6723 | 6556 | 6503 |
| 30° | 6551 | 6363 | 6349 |
| 35° | 6357 | 6161 | 6216 |
| 40° | 6135 | 5971 | 6081 |
| 45° | 5897 | 5776 | 5938 |
| 50° | 5637 | 5564 | 5755 |
| 55° | 5339 | 5310 | 5519 |
| 60° | 4979 | 4993 | 5196 |
| 65° | 4525 | 4566 | 4688 |
| 70° | 3903 | 3972 | 4005 |
| 75° | 3108 | 3192 | 3114 |
| 80° | 2100 | 2177 | 2139 |
| 85° | 1071 | 1423 | 1797 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5938 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 248.6  | 3.9       |
| 10°-20°   | 696.8  | 10.8      |
| 20°-30°   | 1020.0 | 15.8      |
| 30°-40°   | 1184.4 | 18.4      |
| 40°-50°   | 1183.7 | 18.4      |
| 50°-60°   | 1020.5 | 15.8      |
| 60°-70°   | 710.8  | 11.0      |
| 70°-80°   | 324.9  | 5.0       |
| 80°-90°   | 59.3   | 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°    | 1965.3 | 30.5      |
| 0°-40°    | 3149.8 | 48.8      |
| 0°-60°    | 5354.0 | 83.0      |
| 0°-90°    | 6449.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6449.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2642 | 2642  | 2642 | 2642  | 2642 |      |
| 5°  | 2636 | 2626  | 2628 | 2614  | 2617 | 250  |
| 15° | 2506 | 2490  | 2473 | 2450  | 2452 | 707  |
| 25° | 2264 | 2240  | 2208 | 2186  | 2190 | 1042 |
| 35° | 1935 | 1905  | 1876 | 1878  | 1892 | 1209 |
| 45° | 1550 | 1524  | 1518 | 1543  | 1560 | 1195 |
| 55° | 1138 | 1119  | 1132 | 1163  | 1176 | 1016 |
| 65° | 711  | 703   | 717  | 729   | 736  | 703  |
| 75° | 299  | 297   | 307  | 302   | 300  | 322  |
| 85° | 35   | 38    | 46   | 55    | 58   | 52   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2642.2 | 2642.2 | 2642.2 | 2642.2 | 2642.2 |
| 2.5°  | 2647.7 | 2638.4 | 2642.2 | 2631.4 | 2630.1 |
| 5°    | 2636.0 | 2626.1 | 2627.8 | 2613.5 | 2616.8 |
| 7.5°  | 2615.7 | 2604.5 | 2602.6 | 2586.7 | 2589.8 |
| 10°   | 2587.5 | 2573.9 | 2568.1 | 2548.7 | 2550.4 |
| 12.5° | 2551.4 | 2536.3 | 2525.5 | 2503.4 | 2506.5 |
| 15°   | 2506.5 | 2489.7 | 2473.2 | 2450.3 | 2452.2 |
| 17.5° | 2457.0 | 2439.1 | 2415.4 | 2391.2 | 2396.0 |
| 20°   | 2398.5 | 2379.0 | 2351.1 | 2325.9 | 2331.3 |
| 22.5° | 2333.5 | 2311.7 | 2282.9 | 2258.1 | 2261.4 |
| 25°   | 2264.4 | 2240.5 | 2208.0 | 2186.0 | 2190.1 |
| 27.5° | 2189.1 | 2162.5 | 2129.9 | 2110.7 | 2116.9 |
| 30°   | 2108.3 | 2080.6 | 2047.8 | 2034.5 | 2043.2 |
| 32.5° | 2023.2 | 1995.0 | 1963.5 | 1958.5 | 1971.0 |
| 35°   | 1935.2 | 1905.2 | 1875.5 | 1878.4 | 1892.2 |
| 37.5° | 1843.6 | 1814.2 | 1788.5 | 1799.0 | 1813.4 |
| 40°   | 1746.6 | 1719.4 | 1699.8 | 1715.6 | 1731.0 |
| 42.5° | 1649.1 | 1623.2 | 1609.8 | 1631.1 | 1647.7 |
| 45°   | 1549.6 | 1523.9 | 1517.8 | 1542.6 | 1560.3 |
| 47.5° | 1450.8 | 1424.8 | 1425.0 | 1453.0 | 1468.9 |
| 50°   | 1346.6 | 1323.9 | 1329.0 | 1358.7 | 1374.6 |
| 52.5° | 1241.8 | 1220.9 | 1231.3 | 1263.0 | 1281.9 |
| 55°   | 1137.9 | 1118.7 | 1131.9 | 1163.0 | 1176.3 |
| 57.5° | 1031.2 | 1016.7 | 1031.6 | 1059.1 | 1072.0 |
| 60°   | 925.1  | 912.0  | 927.8  | 953.2  | 965.4  |
| 62.5° | 817.9  | 806.7  | 823.4  | 843.9  | 851.2  |
| 65°   | 710.6  | 703.0  | 717.1  | 728.8  | 736.2  |
| 67.5° | 605.3  | 597.9  | 611.9  | 622.2  | 624.5  |
| 70°   | 496.1  | 492.5  | 504.8  | 509.9  | 509.0  |
| 72.5° | 396.1  | 391.9  | 402.4  | 402.5  | 399.5  |
| 75°   | 298.9  | 297.1  | 307.0  | 301.6  | 299.5  |
| 77.5° | 210.6  | 213.1  | 216.8  | 212.2  | 210.5  |
| 80°   | 135.5  | 140.3  | 140.5  | 139.7  | 138.0  |
| 82.5° | 75.9   | 79.9   | 82.0   | 90.8   | 94.3   |
| 85°   | 34.7   | 38.5   | 46.1   | 54.7   | 58.2   |
| 87.5° | 11.7   | 14.8   | 19.3   | 20.7   | 19.6   |
| 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 | 17.74            | 19.32 | 18.11 | 19.64 | 19.95 | 18.02          | 19.61 | 18.39 | 19.92 | 20.24 |
|                 | 3H   | 19.20            | 20.63 | 19.58 | 20.95 | 21.31 | 19.47          | 20.89 | 19.84 | 21.22 | 21.58 |
|                 | 4H   | 19.62            | 20.96 | 20.02 | 21.31 | 21.69 | 19.86          | 21.20 | 20.26 | 21.55 | 21.93 |
|                 | 6H   | 19.83            | 21.07 | 20.24 | 21.43 | 21.82 | 20.05          | 21.29 | 20.46 | 21.65 | 22.05 |
|                 | 8H   | 19.86            | 21.03 | 20.28 | 21.42 | 21.82 | 20.09          | 21.27 | 20.52 | 21.66 | 22.06 |
|                 | 12H  | 19.85            | 20.98 | 20.28 | 21.36 | 21.79 | 20.11          | 21.24 | 20.54 | 21.62 | 22.05 |
| 4H              | 2H   | 18.31            | 19.64 | 18.71 | 19.99 | 20.37 | 18.54          | 19.87 | 18.94 | 20.22 | 20.60 |
|                 | 3H   | 19.94            | 21.06 | 20.35 | 21.45 | 21.85 | 20.16          | 21.28 | 20.57 | 21.67 | 22.07 |
|                 | 4H   | 20.45            | 21.45 | 20.88 | 21.87 | 22.30 | 20.65          | 21.65 | 21.08 | 22.06 | 22.50 |
|                 | 6H   | 20.73            | 21.60 | 21.19 | 22.05 | 22.50 | 20.91          | 21.78 | 21.37 | 22.23 | 22.68 |
|                 | 8H   | 20.78            | 21.59 | 21.24 | 22.03 | 22.50 | 20.97          | 21.79 | 21.44 | 22.23 | 22.70 |
|                 | 12H  | 20.79            | 21.51 | 21.27 | 21.99 | 22.46 | 21.02          | 21.74 | 21.50 | 22.22 | 22.69 |
| 8H              | 4H   | 20.64            | 21.45 | 21.10 | 21.89 | 22.36 | 20.82          | 21.63 | 21.28 | 22.07 | 22.54 |
|                 | 6H   | 20.97            | 21.64 | 21.47 | 22.13 | 22.61 | 21.14          | 21.81 | 21.63 | 22.30 | 22.77 |
|                 | 8H   | 21.04            | 21.64 | 21.55 | 22.15 | 22.64 | 21.23          | 21.83 | 21.74 | 22.33 | 22.82 |
|                 | 12H  | 21.07            | 21.60 | 21.58 | 22.09 | 22.66 | 21.31          | 21.84 | 21.81 | 22.33 | 22.89 |
| 12H             | 4H   | 20.63            | 21.36 | 21.11 | 21.84 | 22.31 | 20.81          | 21.54 | 21.29 | 22.02 | 22.49 |
|                 | 6H   | 20.97            | 21.57 | 21.48 | 22.08 | 22.57 | 21.13          | 21.73 | 21.64 | 22.24 | 22.73 |
|                 | 8H   | 21.07            | 21.60 | 21.58 | 22.09 | 22.66 | 21.26          | 21.79 | 21.76 | 22.28 | 22.84 |

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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