

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: P1498981

Luminaire Tested: MAE-G-4-120-1HI-STD-50-VRDCPH

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1498981  
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-STD-50-VRDCPH  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 1 HI ambient , STD exam illumination levels  
Light Source: -  
Ballast/Driver: -

**Summary**

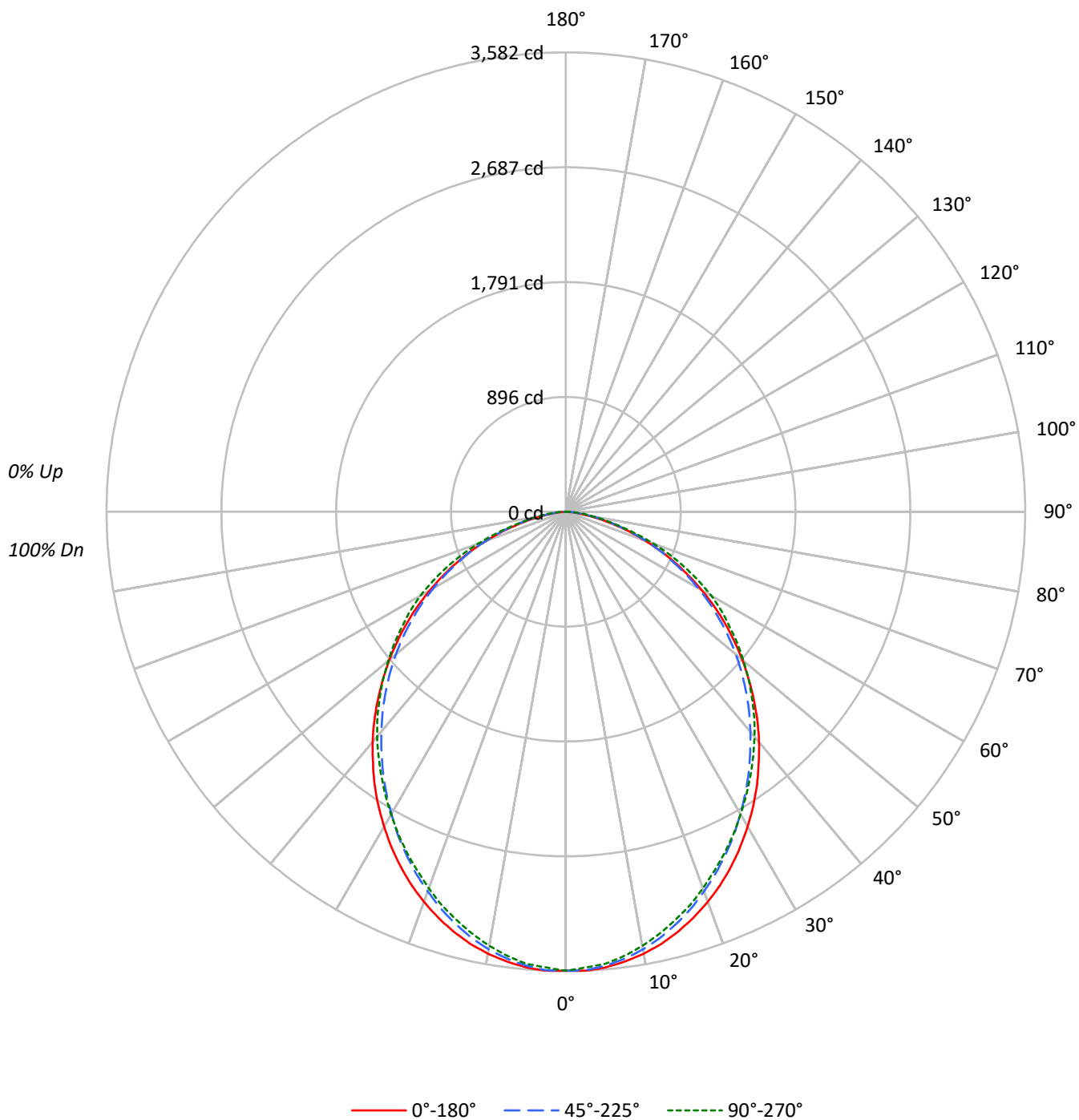
Lumens per Lamp: N/A  
Luminaire Lumens: 8602.0 lumens  
Efficiency: N/A  
Efficacy: 76.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.14 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 112.8  
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: P1498981

CATALOG NUMBER: MAE-G-4-120-1HI-STD-50-VRDCPH

### Luminous Intensity Polar Plot



TEST NUMBER: P1498981

CATALOG NUMBER: MAE-G-4-120-1HI-STD-50-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 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  |
| 2   | 100 | 92  | 86  | 80  | 98  | 90  | 85  | 79  | 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  |  | 66  | 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  | 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  | 29  |  | 39  | 33  | 28  |  | 38  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4814 | 4814 | 4814 |
| 5°  | 4816 | 4798 | 4778 |
| 10° | 4780 | 4733 | 4695 |
| 15° | 4719 | 4634 | 4590 |
| 20° | 4634 | 4510 | 4473 |
| 25° | 4530 | 4376 | 4353 |
| 30° | 4403 | 4225 | 4234 |
| 35° | 4270 | 4083 | 4123 |
| 40° | 4116 | 3932 | 4021 |
| 45° | 3945 | 3782 | 3905 |
| 50° | 3762 | 3621 | 3784 |
| 55° | 3551 | 3431 | 3653 |
| 60° | 3291 | 3212 | 3529 |
| 65° | 2991 | 2921 | 3254 |
| 70° | 2592 | 2611 | 2859 |
| 75° | 2063 | 2192 | 2283 |
| 80° | 1422 | 1652 | 1750 |
| 85° | 792  | 1232 | 1576 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 3945 cd/sqm

TEST NUMBER: P1498981

CATALOG NUMBER: MAE-G-4-120-1HI-STD-50-VRDCPH

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 336.0  | 3.9       |
| 10°-20°   | 938.5  | 10.9      |
| 20°-30°   | 1366.1 | 15.9      |
| 30°-40°   | 1575.3 | 18.3      |
| 40°-50°   | 1562.1 | 18.2      |
| 50°-60°   | 1339.3 | 15.6      |
| 60°-70°   | 941.4  | 10.9      |
| 70°-80°   | 448.9  | 5.2       |
| 80°-90°   | 94.4   | 1.1       |
| 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°    | 2640.6 | 30.7      |
| 0°-40°    | 4215.9 | 49.0      |
| 0°-60°    | 7117.3 | 82.7      |
| 0°-90°    | 8602.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 8602.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 3578 | 3578  | 3578 | 3578  | 3578 |      |
| 5°  | 3566 | 3562  | 3553 | 3530  | 3538 | 338  |
| 15° | 3388 | 3371  | 3326 | 3289  | 3295 | 954  |
| 25° | 3051 | 3012  | 2948 | 2920  | 2932 | 1404 |
| 35° | 2600 | 2546  | 2486 | 2488  | 2510 | 1624 |
| 45° | 2073 | 2026  | 1988 | 2025  | 2052 | 1599 |
| 55° | 1514 | 1471  | 1463 | 1518  | 1557 | 1352 |
| 65° | 939  | 906   | 918  | 990   | 1022 | 930  |
| 75° | 397  | 383   | 422  | 442   | 439  | 429  |
| 85° | 51   | 62    | 80   | 96    | 102  | 73   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1498981

CATALOG NUMBER: MAE-G-4-120-1HI-STD-50-VRDCPH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 3578.2 | 3578.2 | 3578.2 | 3578.2 | 3578.2 |
| 2.5°  | 3582.5 | 3585.2 | 3578.2 | 3552.5 | 3556.2 |
| 5°    | 3565.7 | 3562.4 | 3552.7 | 3529.8 | 3537.5 |
| 7.5°  | 3536.9 | 3532.4 | 3515.0 | 3488.3 | 3493.4 |
| 10°   | 3498.8 | 3489.9 | 3464.4 | 3431.5 | 3436.4 |
| 12.5° | 3449.7 | 3438.1 | 3402.4 | 3365.9 | 3371.4 |
| 15°   | 3387.9 | 3371.0 | 3326.4 | 3289.1 | 3295.2 |
| 17.5° | 3316.9 | 3298.7 | 3245.0 | 3204.8 | 3216.8 |
| 20°   | 3236.5 | 3211.3 | 3150.1 | 3113.1 | 3124.2 |
| 22.5° | 3148.3 | 3116.2 | 3052.7 | 3018.2 | 3028.0 |
| 25°   | 3051.1 | 3011.8 | 2947.9 | 2920.4 | 2932.1 |
| 27.5° | 2946.0 | 2903.2 | 2838.8 | 2814.6 | 2831.2 |
| 30°   | 2834.3 | 2788.5 | 2719.7 | 2707.2 | 2725.2 |
| 32.5° | 2719.8 | 2671.4 | 2604.1 | 2600.7 | 2618.7 |
| 35°   | 2599.5 | 2546.4 | 2485.8 | 2488.4 | 2510.4 |
| 37.5° | 2470.7 | 2420.3 | 2360.9 | 2379.4 | 2400.5 |
| 40°   | 2343.5 | 2291.2 | 2238.6 | 2264.5 | 2289.1 |
| 42.5° | 2211.2 | 2161.3 | 2114.7 | 2145.8 | 2174.3 |
| 45°   | 2073.0 | 2026.4 | 1987.5 | 2024.6 | 2052.1 |
| 47.5° | 1934.7 | 1888.2 | 1859.6 | 1900.9 | 1932.7 |
| 50°   | 1797.4 | 1753.3 | 1729.9 | 1777.0 | 1807.9 |
| 52.5° | 1653.9 | 1611.6 | 1598.7 | 1647.7 | 1685.3 |
| 55°   | 1513.9 | 1470.9 | 1462.6 | 1518.2 | 1557.1 |
| 57.5° | 1369.7 | 1336.1 | 1329.6 | 1391.8 | 1439.0 |
| 60°   | 1223.0 | 1189.4 | 1193.6 | 1267.9 | 1311.4 |
| 62.5° | 1080.2 | 1046.9 | 1053.5 | 1137.0 | 1166.3 |
| 65°   | 939.4  | 906.2  | 917.6  | 990.3  | 1022.1 |
| 67.5° | 800.8  | 769.7  | 792.9  | 859.8  | 880.1  |
| 70°   | 658.8  | 631.4  | 663.6  | 718.4  | 726.7  |
| 72.5° | 526.2  | 502.5  | 542.7  | 578.0  | 578.0  |
| 75°   | 396.9  | 383.1  | 421.7  | 442.2  | 439.1  |
| 77.5° | 283.8  | 276.4  | 310.3  | 321.9  | 319.7  |
| 80°   | 183.5  | 187.7  | 213.2  | 221.2  | 225.8  |
| 82.5° | 106.8  | 115.5  | 134.9  | 155.4  | 160.2  |
| 85°   | 51.3   | 61.7   | 79.8   | 95.8   | 102.1  |
| 87.5° | 17.9   | 24.9   | 33.1   | 36.6   | 35.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1498981

CATALOG NUMBER: MAE-G-4-120-1HI-STD-50-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 | 16.24            | 17.82 | 16.61 | 18.14 | 18.45 | 16.55          | 18.13 | 16.91 | 18.44 | 18.76 |
|                 | 3H   | 17.68            | 19.10 | 18.06 | 19.43 | 19.79 | 18.15          | 19.57 | 18.53 | 19.90 | 20.26 |
|                 | 4H   | 18.10            | 19.44 | 18.50 | 19.79 | 20.17 | 18.62          | 19.96 | 19.02 | 20.30 | 20.68 |
|                 | 6H   | 18.32            | 19.55 | 18.73 | 19.92 | 20.31 | 18.87          | 20.11 | 19.29 | 20.48 | 20.87 |
|                 | 8H   | 18.35            | 19.53 | 18.78 | 19.92 | 20.32 | 18.95          | 20.13 | 19.37 | 20.52 | 20.92 |
|                 | 12H  | 18.35            | 19.48 | 18.78 | 19.87 | 20.29 | 19.00          | 20.13 | 19.43 | 20.51 | 20.94 |
| 4H              | 2H   | 16.77            | 18.11 | 17.17 | 18.45 | 18.83 | 17.02          | 18.36 | 17.42 | 18.70 | 19.08 |
|                 | 3H   | 18.39            | 19.51 | 18.80 | 19.90 | 20.30 | 18.82          | 19.94 | 19.23 | 20.34 | 20.74 |
|                 | 4H   | 18.90            | 19.90 | 19.33 | 20.32 | 20.75 | 19.40          | 20.40 | 19.83 | 20.82 | 21.25 |
|                 | 6H   | 19.19            | 20.07 | 19.65 | 20.51 | 20.96 | 19.75          | 20.62 | 20.21 | 21.07 | 21.52 |
|                 | 8H   | 19.24            | 20.06 | 19.71 | 20.50 | 20.97 | 19.86          | 20.67 | 20.32 | 21.11 | 21.58 |
|                 | 12H  | 19.27            | 20.00 | 19.75 | 20.47 | 20.94 | 19.94          | 20.67 | 20.42 | 21.14 | 21.61 |
| 8H              | 4H   | 19.12            | 19.93 | 19.58 | 20.38 | 20.84 | 19.57          | 20.39 | 20.03 | 20.83 | 21.30 |
|                 | 6H   | 19.47            | 20.15 | 19.97 | 20.64 | 21.11 | 20.00          | 20.67 | 20.49 | 21.16 | 21.64 |
|                 | 8H   | 19.56            | 20.16 | 20.07 | 20.67 | 21.16 | 20.15          | 20.75 | 20.66 | 21.26 | 21.75 |
|                 | 12H  | 19.61            | 20.14 | 20.12 | 20.63 | 21.19 | 20.28          | 20.82 | 20.79 | 21.31 | 21.87 |
| 12H             | 4H   | 19.13            | 19.86 | 19.61 | 20.33 | 20.80 | 19.57          | 20.30 | 20.05 | 20.78 | 21.25 |
|                 | 6H   | 19.49            | 20.09 | 20.00 | 20.60 | 21.09 | 20.00          | 20.60 | 20.51 | 21.11 | 21.60 |
|                 | 8H   | 19.61            | 20.15 | 20.12 | 20.64 | 21.20 | 20.19          | 20.73 | 20.70 | 21.22 | 21.78 |