

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: P1499455

Luminaire Tested: MAE-G-4-120-2STD-STD-40-VRDCPH

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1499455  
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-4-120-2STD-STD-40-VRDCPH  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 2 STD ambient , STD exam illumination levels  
Light Source: -  
Ballast/Driver: -

**Summary**

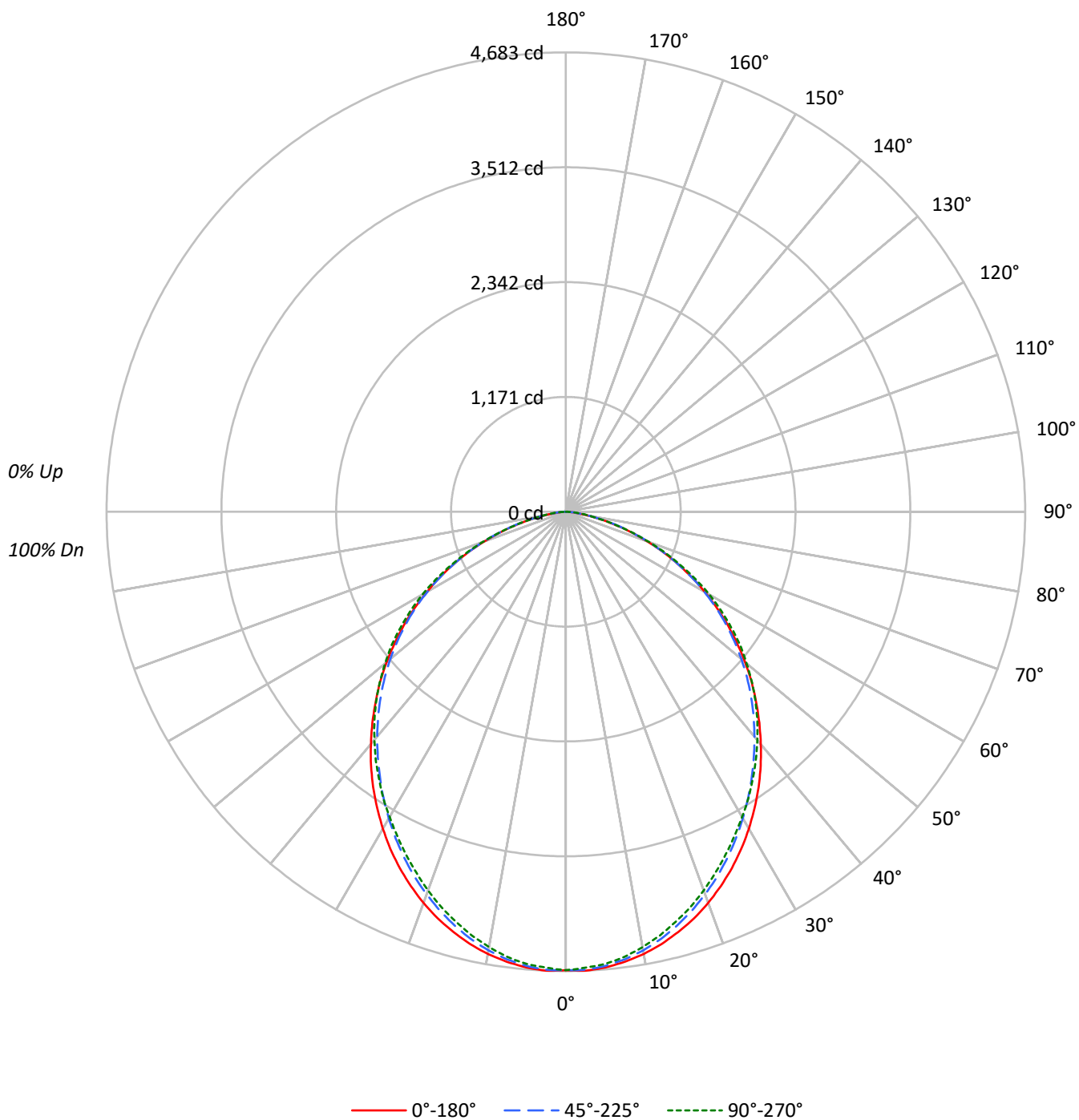
Lumens per Lamp: N/A  
Luminaire Lumens: 11376.0 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.15 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 136.8  
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: P1499455

CATALOG NUMBER: MAE-G-4-120-2STD-STD-40-VRDCPH

### Luminous Intensity Polar Plot



TEST NUMBER: P1499455

CATALOG NUMBER: MAE-G-4-120-2STD-STD-40-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  | 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°  | 6288 | 6288 | 6288 |
| 5°  | 6298 | 6277 | 6249 |
| 10° | 6253 | 6203 | 6156 |
| 15° | 6176 | 6086 | 6027 |
| 20° | 6076 | 5942 | 5883 |
| 25° | 5948 | 5782 | 5724 |
| 30° | 5797 | 5608 | 5582 |
| 35° | 5626 | 5426 | 5459 |
| 40° | 5431 | 5255 | 5334 |
| 45° | 5221 | 5080 | 5203 |
| 50° | 4992 | 4890 | 5037 |
| 55° | 4728 | 4665 | 4829 |
| 60° | 4411 | 4385 | 4552 |
| 65° | 4011 | 4012 | 4126 |
| 70° | 3463 | 3503 | 3553 |
| 75° | 2759 | 2838 | 2805 |
| 80° | 1869 | 1972 | 1978 |
| 85° | 960  | 1318 | 1681 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5221 cd/sqm

TEST NUMBER: P1499455

CATALOG NUMBER: MAE-G-4-120-2STD-STD-40-VRDCPH

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 439.5   | 3.9       |
| 10°-20°   | 1230.9  | 10.8      |
| 20°-30°   | 1799.8  | 15.8      |
| 30°-40°   | 2087.4  | 18.3      |
| 40°-50°   | 2083.7  | 18.3      |
| 50°-60°   | 1794.9  | 15.8      |
| 60°-70°   | 1252.6  | 11.0      |
| 70°-80°   | 578.6   | 5.1       |
| 80°-90°   | 108.5   | 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°    | 3470.2  | 30.5      |
| 0°-40°    | 5557.6  | 48.9      |
| 0°-60°    | 9436.3  | 82.9      |
| 0°-90°    | 11376.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 11376.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 4674 | 4674  | 4674 | 4674  | 4674 |      |
| 5°  | 4663 | 4646  | 4648 | 4621  | 4627 | 442  |
| 15° | 4434 | 4404  | 4369 | 4324  | 4327 | 1250 |
| 25° | 4006 | 3961  | 3895 | 3850  | 3856 | 1844 |
| 35° | 3425 | 3367  | 3304 | 3302  | 3324 | 2141 |
| 45° | 2744 | 2692  | 2670 | 2706  | 2734 | 2117 |
| 55° | 2015 | 1976  | 1989 | 2037  | 2059 | 1800 |
| 65° | 1260 | 1241  | 1260 | 1283  | 1296 | 1246 |
| 75° | 531  | 525   | 546  | 541   | 540  | 571  |
| 85° | 62   | 70    | 85   | 102   | 109  | 92   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1499455

CATALOG NUMBER: MAE-G-4-120-2STD-STD-40-VRDCPH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 4673.6 | 4673.6 | 4673.6 | 4673.6 | 4673.6 |
| 2.5°  | 4683.1 | 4667.8 | 4673.6 | 4653.2 | 4651.9 |
| 5°    | 4662.7 | 4645.8 | 4647.5 | 4620.7 | 4626.8 |
| 7.5°  | 4626.9 | 4607.3 | 4602.0 | 4571.7 | 4577.3 |
| 10°   | 4577.1 | 4553.0 | 4540.0 | 4502.7 | 4505.7 |
| 12.5° | 4513.4 | 4486.1 | 4463.3 | 4420.3 | 4425.2 |
| 15°   | 4434.1 | 4403.5 | 4369.3 | 4324.2 | 4326.9 |
| 17.5° | 4346.7 | 4313.4 | 4265.4 | 4217.5 | 4225.2 |
| 20°   | 4243.3 | 4206.8 | 4150.2 | 4100.4 | 4108.5 |
| 22.5° | 4128.9 | 4087.3 | 4028.3 | 3978.9 | 3983.5 |
| 25°   | 4006.5 | 3960.7 | 3894.7 | 3849.9 | 3855.5 |
| 27.5° | 3873.8 | 3822.7 | 3755.4 | 3715.4 | 3724.7 |
| 30°   | 3731.0 | 3677.3 | 3609.4 | 3579.7 | 3592.8 |
| 32.5° | 3580.6 | 3525.7 | 3459.7 | 3444.0 | 3463.7 |
| 35°   | 3425.2 | 3366.6 | 3303.5 | 3301.7 | 3323.5 |
| 37.5° | 3263.2 | 3205.6 | 3149.0 | 3160.5 | 3183.2 |
| 40°   | 3091.9 | 3037.9 | 2991.8 | 3012.4 | 3036.9 |
| 42.5° | 2919.5 | 2867.6 | 2832.7 | 2862.6 | 2889.1 |
| 45°   | 2743.7 | 2692.1 | 2669.8 | 2706.2 | 2734.3 |
| 47.5° | 2568.8 | 2516.8 | 2505.8 | 2547.8 | 2573.2 |
| 50°   | 2384.7 | 2338.3 | 2336.2 | 2381.7 | 2406.4 |
| 52.5° | 2198.9 | 2156.0 | 2164.0 | 2212.9 | 2243.2 |
| 55°   | 2015.4 | 1975.6 | 1988.6 | 2037.2 | 2058.7 |
| 57.5° | 1826.8 | 1795.1 | 1812.2 | 1855.5 | 1876.8 |
| 60°   | 1639.1 | 1610.0 | 1629.5 | 1671.0 | 1691.7 |
| 62.5° | 1449.2 | 1423.9 | 1446.4 | 1481.1 | 1494.7 |
| 65°   | 1259.7 | 1240.7 | 1260.2 | 1282.6 | 1296.0 |
| 67.5° | 1073.1 | 1055.3 | 1076.4 | 1098.0 | 1102.9 |
| 70°   | 880.3  | 869.1  | 890.5  | 903.3  | 903.1  |
| 72.5° | 702.9  | 691.9  | 712.2  | 717.0  | 713.4  |
| 75°   | 530.8  | 525.0  | 546.0  | 541.4  | 539.6  |
| 77.5° | 374.5  | 377.2  | 388.3  | 384.9  | 384.1  |
| 80°   | 241.2  | 249.6  | 254.5  | 257.0  | 255.3  |
| 82.5° | 135.6  | 143.3  | 150.7  | 168.5  | 175.6  |
| 85°   | 62.2   | 69.8   | 85.4   | 102.0  | 108.9  |
| 87.5° | 21.1   | 27.0   | 35.8   | 38.5   | 36.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1499455

CATALOG NUMBER: MAE-G-4-120-2STD-STD-40-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 | 17.31            | 18.90 | 17.68 | 19.21 | 19.53 | 17.54          | 19.12 | 17.90 | 19.44 | 19.75 |
|                 | 3H   | 18.78            | 20.20 | 19.16 | 20.53 | 20.89 | 19.01          | 20.43 | 19.38 | 20.76 | 21.12 |
|                 | 4H   | 19.20            | 20.54 | 19.60 | 20.89 | 21.27 | 19.42          | 20.76 | 19.82 | 21.11 | 21.48 |
|                 | 6H   | 19.41            | 20.65 | 19.82 | 21.01 | 21.41 | 19.63          | 20.87 | 20.04 | 21.23 | 21.62 |
|                 | 8H   | 19.44            | 20.62 | 19.86 | 21.01 | 21.41 | 19.67          | 20.85 | 20.10 | 21.24 | 21.64 |
|                 | 12H  | 19.44            | 20.57 | 19.87 | 20.95 | 21.38 | 19.70          | 20.83 | 20.13 | 21.21 | 21.64 |
| 4H              | 2H   | 17.87            | 19.21 | 18.27 | 19.56 | 19.94 | 18.06          | 19.39 | 18.45 | 19.74 | 20.12 |
|                 | 3H   | 19.52            | 20.63 | 19.93 | 21.03 | 21.43 | 19.71          | 20.82 | 20.12 | 21.22 | 21.62 |
|                 | 4H   | 20.03            | 21.03 | 20.46 | 21.44 | 21.88 | 20.22          | 21.22 | 20.65 | 21.63 | 22.07 |
|                 | 6H   | 20.31            | 21.18 | 20.77 | 21.62 | 22.08 | 20.50          | 21.37 | 20.96 | 21.81 | 22.27 |
|                 | 8H   | 20.35            | 21.17 | 20.82 | 21.61 | 22.08 | 20.57          | 21.38 | 21.03 | 21.83 | 22.29 |
|                 | 12H  | 20.37            | 21.09 | 20.85 | 21.57 | 22.04 | 20.62          | 21.35 | 21.10 | 21.83 | 22.30 |
| 8H              | 4H   | 20.21            | 21.03 | 20.68 | 21.47 | 21.94 | 20.39          | 21.20 | 20.85 | 21.64 | 22.11 |
|                 | 6H   | 20.56            | 21.23 | 21.05 | 21.72 | 22.19 | 20.73          | 21.40 | 21.23 | 21.89 | 22.37 |
|                 | 8H   | 20.63            | 21.23 | 21.14 | 21.73 | 22.22 | 20.83          | 21.44 | 21.35 | 21.94 | 22.43 |
|                 | 12H  | 20.66            | 21.19 | 21.17 | 21.68 | 22.25 | 20.93          | 21.46 | 21.43 | 21.95 | 22.51 |
| 12H             | 4H   | 20.21            | 20.94 | 20.69 | 21.42 | 21.89 | 20.38          | 21.11 | 20.86 | 21.59 | 22.06 |
|                 | 6H   | 20.56            | 21.16 | 21.07 | 21.67 | 22.15 | 20.73          | 21.33 | 21.24 | 21.84 | 22.33 |
|                 | 8H   | 20.66            | 21.19 | 21.17 | 21.68 | 22.25 | 20.87          | 21.40 | 21.38 | 21.89 | 22.45 |