

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: P1499471

Luminaire Tested: MAE-G-4-120-3HI-35-90-WDDCPH

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1499471  
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-4-120-3HI-35-90-WDDCPH  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, WDDCPH frame, 3 HI ambient illumination levels  
Light Source: -  
Ballast/Driver: -

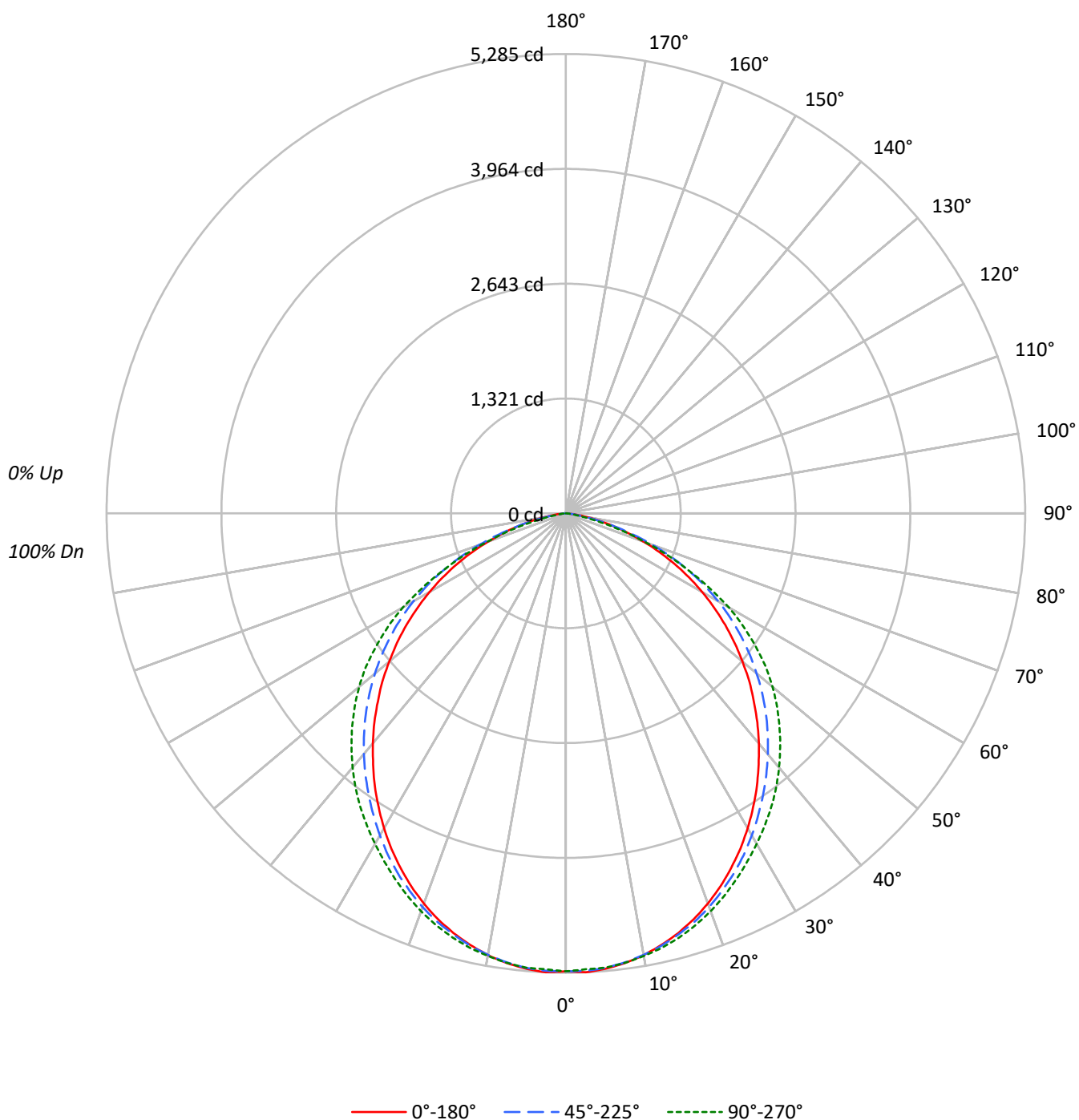
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13352.0 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 132.9  
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  | 30  | 10  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 110 | 105 | 102 | 98  | 107 | 103 | 100 | 96  | 99  | 96  | 93  | 95  | 93  | 91  | 92  | 90  | 88  | 86  |    |    |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  | 73  |    |    |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  | 75  | 69  | 65  | 72  | 68  | 64  | 62  |    |    |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 64  | 57  | 69  | 62  | 57  | 67  | 61  | 56  | 65  | 59  | 55  | 53  |    |    |
| 5   | 78  | 65  | 56  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 49  | 60  | 54  | 49  | 58  | 53  | 48  | 46  |    |    |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  | 54  | 48  | 43  | 53  | 47  | 43  | 41  |    |    |
| 7   | 67  | 53  | 45  | 39  | 65  | 53  | 44  | 39  | 51  | 44  | 38  | 50  | 43  | 38  | 48  | 42  | 38  | 36  |    |    |
| 8   | 62  | 49  | 40  | 35  | 60  | 48  | 40  | 35  | 47  | 40  | 34  | 46  | 39  | 34  | 44  | 38  | 34  | 32  |    |    |
| 9   | 58  | 45  | 37  | 31  | 57  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 29  |    |    |
| 10  | 54  | 41  | 34  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7088 | 7088 | 7088 |
| 5°  | 7104 | 7089 | 7085 |
| 10° | 7051 | 7048 | 7064 |
| 15° | 6961 | 6983 | 7034 |
| 20° | 6840 | 6903 | 6974 |
| 25° | 6681 | 6788 | 6895 |
| 30° | 6500 | 6648 | 6822 |
| 35° | 6296 | 6496 | 6770 |
| 40° | 6067 | 6350 | 6703 |
| 45° | 5820 | 6193 | 6617 |
| 50° | 5550 | 6002 | 6499 |
| 55° | 5252 | 5769 | 6249 |
| 60° | 4874 | 5451 | 5831 |
| 65° | 4401 | 4971 | 4994 |
| 70° | 3757 | 4174 | 3882 |
| 75° | 2950 | 3045 | 2388 |
| 80° | 1925 | 1567 | 924  |
| 85° | 923  | 619  | 491  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6617 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 497.6   | 3.7       |
| 10°-20°   | 1412.7  | 10.6      |
| 20°-30°   | 2101.1  | 15.7      |
| 30°-40°   | 2476.0  | 18.5      |
| 40°-50°   | 2510.4  | 18.8      |
| 50°-60°   | 2187.5  | 16.4      |
| 60°-70°   | 1496.0  | 11.2      |
| 70°-80°   | 601.0   | 4.5       |
| 80°-90°   | 69.7    | 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°    | 4011.5  | 30.0      |
| 0°-40°    | 6487.5  | 48.6      |
| 0°-60°    | 11185.3 | 83.8      |
| 0°-90°    | 13352.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 13352.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 5268 | 5268  | 5268 | 5268  | 5268 |      |
| 5°  | 5260 | 5228  | 5248 | 5242  | 5246 | 499  |
| 15° | 4998 | 4976  | 5013 | 5034  | 5050 | 1408 |
| 25° | 4500 | 4502  | 4572 | 4606  | 4644 | 2072 |
| 35° | 3833 | 3850  | 3955 | 4052  | 4122 | 2395 |
| 45° | 3059 | 3100  | 3255 | 3401  | 3478 | 2361 |
| 55° | 2239 | 2286  | 2459 | 2614  | 2664 | 1999 |
| 65° | 1382 | 1445  | 1562 | 1574  | 1569 | 1367 |
| 75° | 568  | 606   | 586  | 503   | 459  | 610  |
| 85° | 60   | 54    | 40   | 35    | 32   | 92   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 5268.1 | 5268.1 | 5268.1 | 5268.1 | 5268.1 |
| 2.5°  | 5285.0 | 5249.8 | 5268.1 | 5264.3 | 5250.8 |
| 5°    | 5259.5 | 5227.7 | 5248.4 | 5242.5 | 5246.0 |
| 7.5°  | 5218.0 | 5188.9 | 5210.7 | 5209.7 | 5215.6 |
| 10°   | 5160.9 | 5131.6 | 5158.5 | 5163.3 | 5170.6 |
| 12.5° | 5085.3 | 5061.0 | 5093.9 | 5103.6 | 5118.1 |
| 15°   | 4997.5 | 4975.7 | 5013.4 | 5034.1 | 5050.0 |
| 17.5° | 4895.2 | 4876.9 | 4925.6 | 4945.3 | 4967.1 |
| 20°   | 4777.0 | 4763.8 | 4820.9 | 4839.2 | 4871.0 |
| 22.5° | 4645.6 | 4638.4 | 4697.9 | 4725.9 | 4762.5 |
| 25°   | 4500.5 | 4501.9 | 4572.4 | 4605.5 | 4644.3 |
| 27.5° | 4348.4 | 4350.8 | 4431.3 | 4477.4 | 4518.8 |
| 30°   | 4183.9 | 4191.2 | 4279.0 | 4336.3 | 4391.0 |
| 32.5° | 4009.7 | 4024.3 | 4119.3 | 4197.4 | 4258.2 |
| 35°   | 3833.1 | 3850.1 | 3955.1 | 4052.3 | 4121.7 |
| 37.5° | 3642.0 | 3670.0 | 3788.2 | 3903.9 | 3975.6 |
| 40°   | 3454.3 | 3482.3 | 3615.1 | 3742.9 | 3816.2 |
| 42.5° | 3260.8 | 3296.0 | 3437.4 | 3579.8 | 3650.3 |
| 45°   | 3058.6 | 3099.8 | 3254.6 | 3400.8 | 3477.5 |
| 47.5° | 2864.8 | 2901.4 | 3064.5 | 3216.9 | 3296.0 |
| 50°   | 2651.5 | 2697.8 | 2867.2 | 3026.8 | 3104.9 |
| 52.5° | 2448.3 | 2490.8 | 2665.0 | 2828.4 | 2898.9 |
| 55°   | 2238.8 | 2286.2 | 2459.3 | 2613.8 | 2663.9 |
| 57.5° | 2024.3 | 2081.6 | 2248.5 | 2377.7 | 2425.1 |
| 60°   | 1811.3 | 1868.4 | 2025.6 | 2131.7 | 2166.9 |
| 62.5° | 1599.2 | 1660.3 | 1797.8 | 1868.4 | 1868.4 |
| 65°   | 1382.4 | 1444.6 | 1561.5 | 1573.6 | 1568.7 |
| 67.5° | 1165.7 | 1227.9 | 1316.7 | 1294.7 | 1280.1 |
| 70°   | 954.9  | 1008.5 | 1061.0 | 1020.6 | 986.7  |
| 72.5° | 750.3  | 801.5  | 810.1  | 751.7  | 708.9  |
| 75°   | 567.5  | 605.5  | 585.8  | 503.2  | 459.3  |
| 77.5° | 395.8  | 417.8  | 376.4  | 292.4  | 257.1  |
| 80°   | 248.5  | 258.2  | 202.2  | 142.4  | 119.3  |
| 82.5° | 134.1  | 135.1  | 87.8   | 71.9   | 67.0   |
| 85°   | 59.8   | 53.6   | 40.1   | 35.3   | 31.8   |
| 87.5° | 20.7   | 18.3   | 14.5   | 13.5   | 11.0   |
| 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 | 17.73            | 19.31 | 18.10 | 19.63 | 19.94 | 18.71          | 20.30 | 19.08 | 20.61 | 20.93 |
|                 | 3H   | 19.14            | 20.56 | 19.52 | 20.89 | 21.25 | 19.92          | 21.34 | 20.30 | 21.67 | 22.03 |
|                 | 4H   | 19.53            | 20.87 | 19.93 | 21.22 | 21.59 | 20.13          | 21.47 | 20.53 | 21.82 | 22.19 |
|                 | 6H   | 19.71            | 20.94 | 20.12 | 21.31 | 21.70 | 20.15          | 21.38 | 20.56 | 21.75 | 22.14 |
|                 | 8H   | 19.72            | 20.90 | 20.15 | 21.29 | 21.69 | 20.13          | 21.30 | 20.55 | 21.69 | 22.09 |
|                 | 12H  | 19.71            | 20.84 | 20.14 | 21.22 | 21.65 | 20.10          | 21.23 | 20.53 | 21.61 | 22.04 |
| 4H              | 2H   | 18.40            | 19.74 | 18.80 | 20.08 | 20.46 | 19.19          | 20.53 | 19.59 | 20.87 | 21.25 |
|                 | 3H   | 19.97            | 21.08 | 20.38 | 21.47 | 21.87 | 20.56          | 21.67 | 20.97 | 22.07 | 22.47 |
|                 | 4H   | 20.45            | 21.44 | 20.88 | 21.85 | 22.29 | 20.83          | 21.83 | 21.27 | 22.24 | 22.68 |
|                 | 6H   | 20.69            | 21.55 | 21.14 | 21.99 | 22.45 | 20.88          | 21.75 | 21.34 | 22.19 | 22.65 |
|                 | 8H   | 20.71            | 21.51 | 21.17 | 21.96 | 22.42 | 20.86          | 21.67 | 21.32 | 22.11 | 22.58 |
|                 | 12H  | 20.71            | 21.43 | 21.19 | 21.91 | 22.38 | 20.84          | 21.56 | 21.32 | 22.04 | 22.51 |
| 8H              | 4H   | 20.59            | 21.40 | 21.05 | 21.84 | 22.31 | 20.95          | 21.76 | 21.41 | 22.20 | 22.67 |
|                 | 6H   | 20.87            | 21.53 | 21.36 | 22.02 | 22.50 | 21.01          | 21.67 | 21.51 | 22.16 | 22.64 |
|                 | 8H   | 20.91            | 21.50 | 21.42 | 22.01 | 22.50 | 20.99          | 21.58 | 21.50 | 22.09 | 22.58 |
|                 | 12H  | 20.92            | 21.44 | 21.43 | 21.93 | 22.50 | 20.98          | 21.50 | 21.48 | 21.99 | 22.55 |
| 12H             | 4H   | 20.57            | 21.29 | 21.06 | 21.77 | 22.24 | 20.94          | 21.66 | 21.42 | 22.14 | 22.61 |
|                 | 6H   | 20.84            | 21.43 | 21.35 | 21.94 | 22.43 | 20.99          | 21.58 | 21.50 | 22.09 | 22.58 |
|                 | 8H   | 20.90            | 21.42 | 21.41 | 21.92 | 22.48 | 20.99          | 21.51 | 21.50 | 22.00 | 22.57 |