

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: P1499005

Luminaire Tested: MAE-G-4-120-1LO-50-VRDCPH

Issue Date: 6/26/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1499005  
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-4-120-1LO-50-VRDCPH  
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 1 LO ambient illumination levels  
Light Source: -  
Ballast/Driver: -

**Summary**

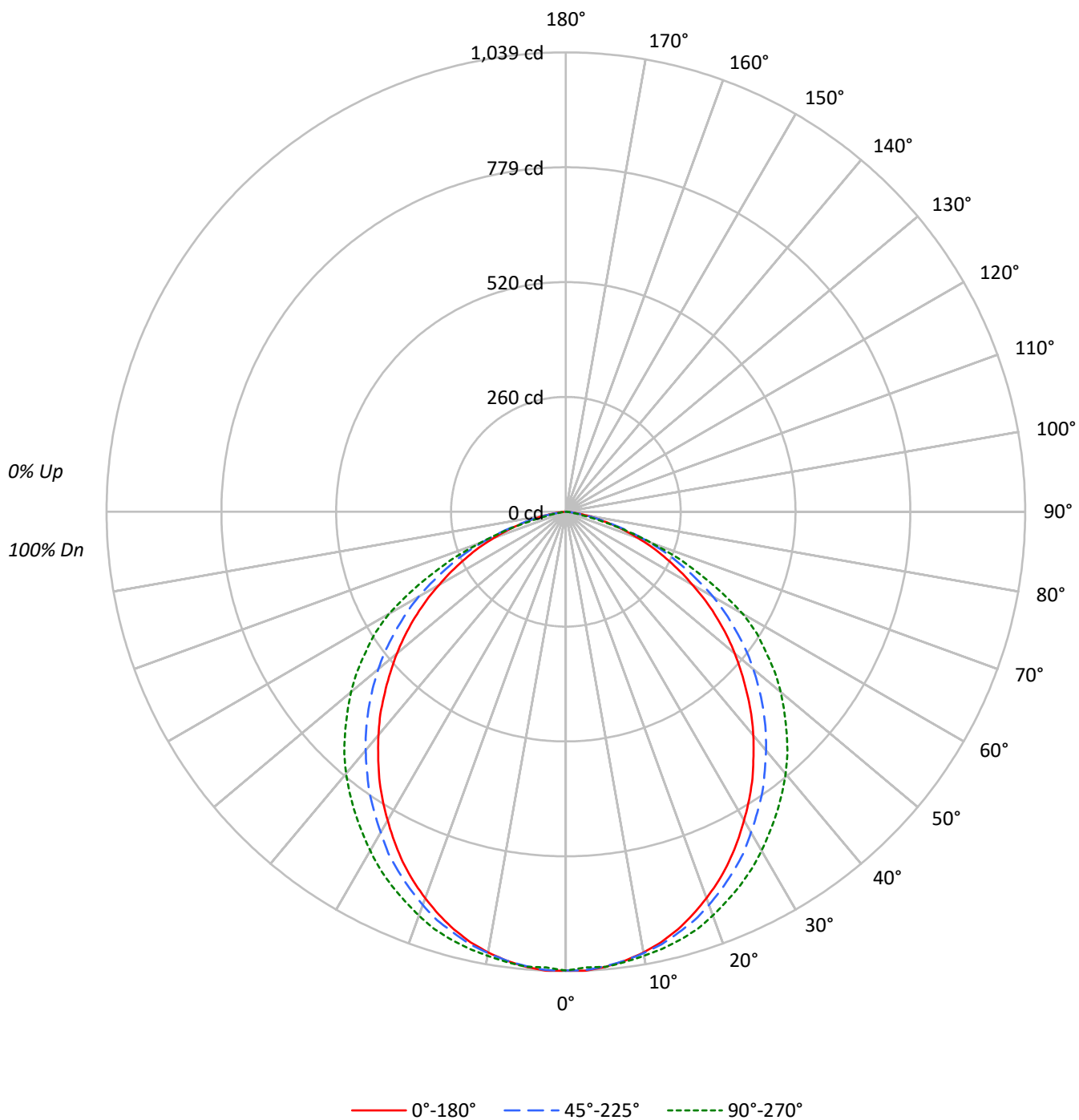
Lumens per Lamp: N/A  
Luminaire Lumens: 2612.0 lumens  
Efficiency: N/A  
Efficacy: 108.8 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.27 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 24  
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: P1499005

CATALOG NUMBER: MAE-G-4-120-1LO-50-VRDCPH

### Luminous Intensity Polar Plot



TEST NUMBER: P1499005

CATALOG NUMBER: MAE-G-4-120-1LO-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  | 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 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  | 86  |    |    |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 73  |    |    |
| 3   | 92  | 82  | 74  | 68  | 90  | 80  | 73  | 67  | 77  | 71  | 66  | 75  | 70  | 65  | 72  | 68  | 64  | 62  |    |    |
| 4   | 84  | 73  | 65  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 55  | 53  |    |    |
| 5   | 78  | 65  | 57  | 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  | 55  | 48  | 43  | 53  | 47  | 43  | 41  |    |    |
| 7   | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 38  | 48  | 43  | 38  | 36  |    |    |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 40  | 35  | 47  | 40  | 35  | 46  | 39  | 34  | 45  | 39  | 34  | 32  |    |    |
| 9   | 58  | 45  | 37  | 31  | 57  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 29  |    |    |
| 10  | 54  | 41  | 34  | 29  | 53  | 41  | 34  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1396 | 1396 | 1396 |
| 5°  | 1395 | 1393 | 1395 |
| 10° | 1383 | 1385 | 1393 |
| 15° | 1362 | 1372 | 1395 |
| 20° | 1332 | 1355 | 1391 |
| 25° | 1296 | 1332 | 1385 |
| 30° | 1252 | 1301 | 1375 |
| 35° | 1209 | 1273 | 1366 |
| 40° | 1159 | 1238 | 1358 |
| 45° | 1102 | 1202 | 1344 |
| 50° | 1044 | 1159 | 1328 |
| 55° | 977  | 1103 | 1296 |
| 60° | 892  | 1036 | 1245 |
| 65° | 798  | 927  | 1069 |
| 70° | 681  | 781  | 816  |
| 75° | 528  | 567  | 458  |
| 80° | 347  | 301  | 162  |
| 85° | 184  | 139  | 93   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1344 cd/sqm

TEST NUMBER: P1499005

CATALOG NUMBER: MAE-G-4-120-1LO-50-VRDCPH

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 98.0   | 3.8       |
| 10°-20°   | 278.4  | 10.7      |
| 20°-30°   | 414.0  | 15.9      |
| 30°-40°   | 486.8  | 18.6      |
| 40°-50°   | 491.3  | 18.8      |
| 50°-60°   | 426.6  | 16.3      |
| 60°-70°   | 290.3  | 11.1      |
| 70°-80°   | 113.1  | 4.3       |
| 80°-90°   | 13.5   | 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°    | 790.4  | 30.3      |
| 0°-40°    | 1277.2 | 48.9      |
| 0°-60°    | 2195.0 | 84.0      |
| 0°-90°    | 2612.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2612.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1038 | 1038  | 1038 | 1038  | 1038 |      |
| 5°  | 1033 | 1032  | 1032 | 1032  | 1033 | 98   |
| 15° | 978  | 979   | 985  | 996   | 1002 | 275  |
| 25° | 873  | 878   | 897  | 920   | 933  | 402  |
| 35° | 736  | 745   | 775  | 811   | 832  | 460  |
| 45° | 579  | 594   | 632  | 681   | 706  | 447  |
| 55° | 416  | 430   | 470  | 524   | 552  | 372  |
| 65° | 251  | 263   | 291  | 322   | 336  | 249  |
| 75° | 102  | 108   | 109  | 98    | 88   | 110  |
| 85° | 12   | 12    | 9    | 8     | 6    | 17   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P1499005

CATALOG NUMBER: MAE-G-4-120-1LO-50-VRDCPH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1037.5 | 1037.5 | 1037.5 | 1037.5 | 1037.5 |
| 2.5°  | 1039.0 | 1039.0 | 1037.5 | 1033.0 | 1031.5 |
| 5°    | 1033.0 | 1031.5 | 1031.5 | 1031.5 | 1033.0 |
| 7.5°  | 1024.1 | 1024.1 | 1024.1 | 1025.6 | 1027.1 |
| 10°   | 1012.1 | 1012.1 | 1013.6 | 1016.6 | 1019.6 |
| 12.5° | 997.2  | 998.7  | 1001.7 | 1007.6 | 1012.1 |
| 15°   | 977.8  | 979.3  | 985.3  | 995.7  | 1001.7 |
| 17.5° | 955.4  | 959.9  | 968.8  | 980.8  | 989.7  |
| 20°   | 930.0  | 934.5  | 946.4  | 961.4  | 971.8  |
| 22.5° | 903.2  | 907.6  | 922.6  | 940.5  | 952.4  |
| 25°   | 873.3  | 877.8  | 897.2  | 919.6  | 933.0  |
| 27.5° | 840.5  | 846.4  | 870.3  | 894.2  | 910.6  |
| 30°   | 806.1  | 813.6  | 837.5  | 867.3  | 885.2  |
| 32.5° | 771.8  | 780.7  | 806.1  | 840.5  | 858.4  |
| 35°   | 736.0  | 744.9  | 774.8  | 810.6  | 831.5  |
| 37.5° | 697.1  | 707.6  | 738.9  | 782.2  | 803.1  |
| 40°   | 659.8  | 670.3  | 704.6  | 750.9  | 773.3  |
| 42.5° | 621.0  | 633.0  | 668.8  | 716.6  | 741.9  |
| 45°   | 579.2  | 594.1  | 631.5  | 680.7  | 706.1  |
| 47.5° | 538.9  | 552.3  | 592.6  | 643.4  | 670.3  |
| 50°   | 498.6  | 513.5  | 553.8  | 606.1  | 634.4  |
| 52.5° | 458.3  | 471.7  | 513.5  | 565.8  | 595.6  |
| 55°   | 416.5  | 429.9  | 470.2  | 524.0  | 552.3  |
| 57.5° | 374.7  | 391.1  | 428.4  | 480.7  | 512.0  |
| 60°   | 331.4  | 346.3  | 385.1  | 437.4  | 462.8  |
| 62.5° | 291.1  | 304.5  | 337.4  | 386.6  | 398.6  |
| 65°   | 250.8  | 262.7  | 291.1  | 322.4  | 335.9  |
| 67.5° | 213.5  | 222.4  | 247.8  | 268.7  | 274.7  |
| 70°   | 173.2  | 182.1  | 198.5  | 210.5  | 207.5  |
| 72.5° | 137.3  | 143.3  | 153.8  | 152.3  | 144.8  |
| 75°   | 101.5  | 107.5  | 109.0  | 98.5   | 88.1   |
| 77.5° | 71.7   | 74.6   | 70.2   | 55.2   | 44.8   |
| 80°   | 44.8   | 46.3   | 38.8   | 23.9   | 20.9   |
| 82.5° | 25.4   | 25.4   | 17.9   | 14.9   | 11.9   |
| 85°   | 11.9   | 11.9   | 9.0    | 7.5    | 6.0    |
| 87.5° | 4.5    | 4.5    | 3.0    | 3.0    | 3.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1499005

CATALOG NUMBER: MAE-G-4-120-1LO-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 | 11.76            | 13.34 | 12.13 | 13.66 | 13.97 | 13.34          | 14.92 | 13.71 | 15.24 | 15.55 |
|                 | 3H   | 13.10            | 14.52 | 13.48 | 14.84 | 15.20 | 14.61          | 16.03 | 14.99 | 16.36 | 16.72 |
|                 | 4H   | 13.47            | 14.80 | 13.87 | 15.14 | 15.52 | 14.81          | 16.14 | 15.21 | 16.48 | 16.86 |
|                 | 6H   | 13.63            | 14.86 | 14.04 | 15.22 | 15.62 | 14.80          | 16.03 | 15.22 | 16.40 | 16.79 |
|                 | 8H   | 13.65            | 14.82 | 14.07 | 15.20 | 15.60 | 14.78          | 15.95 | 15.20 | 16.34 | 16.74 |
|                 | 12H  | 13.64            | 14.76 | 14.07 | 15.14 | 15.57 | 14.75          | 15.87 | 15.18 | 16.25 | 16.68 |
| 4H              | 2H   | 12.43            | 13.76 | 12.83 | 14.11 | 14.48 | 13.72          | 15.05 | 14.12 | 15.40 | 15.77 |
|                 | 3H   | 13.93            | 15.03 | 14.34 | 15.43 | 15.83 | 15.16          | 16.26 | 15.57 | 16.66 | 17.06 |
|                 | 4H   | 14.37            | 15.36 | 14.80 | 15.77 | 16.21 | 15.41          | 16.40 | 15.84 | 16.81 | 17.25 |
|                 | 6H   | 14.59            | 15.45 | 15.05 | 15.89 | 16.35 | 15.44          | 16.30 | 15.89 | 16.74 | 17.20 |
|                 | 8H   | 14.62            | 15.42 | 15.08 | 15.86 | 16.33 | 15.41          | 16.21 | 15.87 | 16.66 | 17.12 |
|                 | 12H  | 14.62            | 15.34 | 15.10 | 15.81 | 16.28 | 15.39          | 16.10 | 15.87 | 16.58 | 17.05 |
| 8H              | 4H   | 14.53            | 15.33 | 14.99 | 15.77 | 16.24 | 15.49          | 16.30 | 15.96 | 16.74 | 17.21 |
|                 | 6H   | 14.79            | 15.44 | 15.28 | 15.93 | 16.41 | 15.53          | 16.19 | 16.02 | 16.68 | 17.15 |
|                 | 8H   | 14.83            | 15.42 | 15.34 | 15.92 | 16.41 | 15.50          | 16.09 | 16.01 | 16.60 | 17.09 |
|                 | 12H  | 14.85            | 15.37 | 15.36 | 15.86 | 16.42 | 15.49          | 16.01 | 16.00 | 16.50 | 17.06 |
| 12H             | 4H   | 14.51            | 15.22 | 14.99 | 15.70 | 16.17 | 15.48          | 16.20 | 15.96 | 16.67 | 17.14 |
|                 | 6H   | 14.76            | 15.35 | 15.27 | 15.86 | 16.34 | 15.50          | 16.09 | 16.01 | 16.60 | 17.09 |
|                 | 8H   | 14.82            | 15.34 | 15.33 | 15.84 | 16.40 | 15.50          | 16.02 | 16.01 | 16.51 | 17.07 |