

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: P688322

Luminaire Tested: FLR-MC-22-L3C3 (HI)-50-CP125

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688322  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2207-724-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR-MC-22-L3C3 (HI)-50-CP125  
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 5000K Luminaire at High Lumen setting for Medical/Cleanroom  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

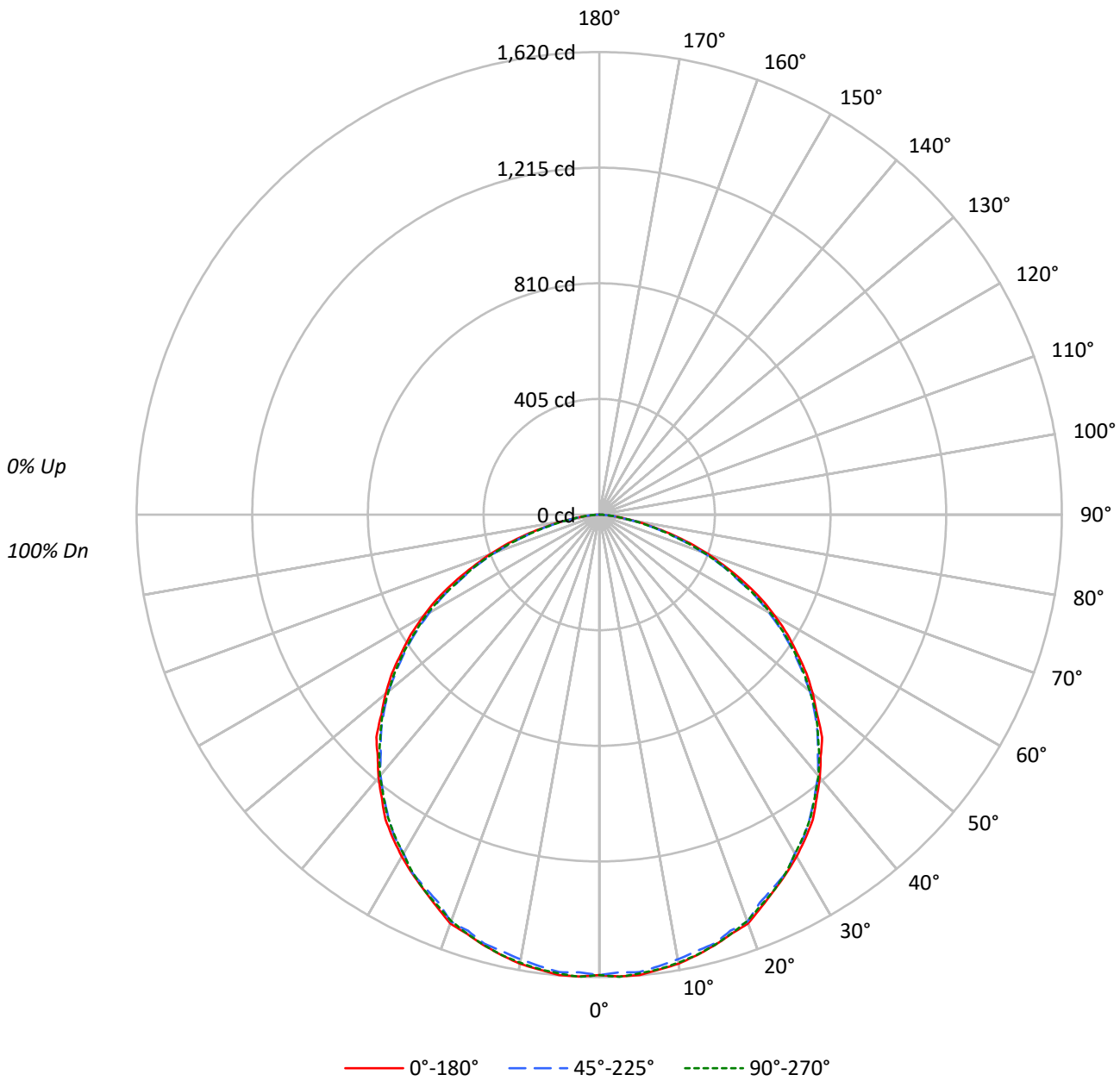
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4474.0 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 40.5  
Input Voltage (V): 120  
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  | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2   | 100 | 92  | 85  | 79  | 97  | 90  | 84  | 78  | 86  | 81  | 77  | 83  | 79  | 75  | 80  | 76  | 73  | 71  |
| 3   | 91  | 81  | 73  | 66  | 88  | 79  | 72  | 66  | 76  | 70  | 64  | 73  | 68  | 63  | 71  | 66  | 62  | 60  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 68  | 61  | 55  | 65  | 59  | 54  | 63  | 58  | 54  | 51  |
| 5   | 77  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 61  | 53  | 48  | 59  | 52  | 47  | 57  | 51  | 47  | 44  |
| 6   | 71  | 57  | 49  | 42  | 69  | 56  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 51  | 46  | 41  | 39  |
| 7   | 66  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 36  | 34  |
| 8   | 61  | 48  | 39  | 33  | 59  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 43  | 37  | 33  | 31  |
| 9   | 57  | 44  | 35  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 29  | 40  | 34  | 29  | 28  |
| 10  | 53  | 40  | 32  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 27  | 25  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4340 | 4340 | 4340 |
| 5°  | 4373 | 4345 | 4359 |
| 10° | 4365 | 4323 | 4356 |
| 15° | 4351 | 4334 | 4349 |
| 20° | 4365 | 4346 | 4338 |
| 25° | 4309 | 4281 | 4306 |
| 30° | 4295 | 4259 | 4261 |
| 35° | 4285 | 4234 | 4243 |
| 40° | 4221 | 4188 | 4194 |
| 45° | 4200 | 4113 | 4120 |
| 50° | 4087 | 4030 | 4030 |
| 55° | 3966 | 3879 | 3902 |
| 60° | 3828 | 3695 | 3745 |
| 65° | 3565 | 3382 | 3414 |
| 70° | 3196 | 3015 | 3062 |
| 75° | 2633 | 2473 | 2465 |
| 80° | 1844 | 1739 | 1739 |
| 85° | 997  | 892  | 892  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4200 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 153.0  | 3.4       |
| 10°-20°   | 438.9  | 9.8       |
| 20°-30°   | 667.1  | 14.9      |
| 30°-40°   | 806.8  | 18.0      |
| 40°-50°   | 835.2  | 18.7      |
| 50°-60°   | 742.0  | 16.6      |
| 60°-70°   | 533.1  | 11.9      |
| 70°-80°   | 254.9  | 5.7       |
| 80°-90°   | 43.0   | 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°    | 1258.9 | 28.1      |
| 0°-40°    | 2065.8 | 46.2      |
| 0°-60°    | 3643.0 | 81.4      |
| 0°-90°    | 4474.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4474.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1613 | 1613  | 1613 | 1613  | 1613 |      |
| 5°  | 1619 | 1608  | 1608 | 1610  | 1614 | 154  |
| 15° | 1562 | 1552  | 1556 | 1552  | 1561 | 441  |
| 25° | 1451 | 1444  | 1442 | 1448  | 1450 | 670  |
| 35° | 1304 | 1296  | 1289 | 1287  | 1292 | 813  |
| 45° | 1104 | 1088  | 1081 | 1077  | 1082 | 845  |
| 55° | 845  | 837   | 827  | 822   | 832  | 757  |
| 65° | 560  | 554   | 531  | 518   | 536  | 553  |
| 75° | 253  | 249   | 238  | 218   | 237  | 272  |
| 85° | 32   | 31    | 29   | 27    | 29   | 46   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1612.7 | 1612.7 | 1612.7 | 1612.7 | 1612.7 |
| 2.5°  | 1619.5 | 1607.6 | 1605.1 | 1620.4 | 1620.4 |
| 5°    | 1618.7 | 1607.6 | 1608.5 | 1610.2 | 1613.6 |
| 7.5°  | 1607.6 | 1601.7 | 1595.7 | 1601.7 | 1605.9 |
| 10°   | 1597.4 | 1583.8 | 1582.1 | 1584.7 | 1594.0 |
| 12.5° | 1580.4 | 1565.1 | 1566.8 | 1571.1 | 1579.6 |
| 15°   | 1561.7 | 1551.5 | 1555.8 | 1552.4 | 1560.9 |
| 17.5° | 1539.6 | 1539.6 | 1528.6 | 1526.0 | 1538.8 |
| 20°   | 1524.3 | 1503.1 | 1517.5 | 1504.8 | 1515.0 |
| 22.5° | 1486.1 | 1474.2 | 1470.8 | 1481.0 | 1481.0 |
| 25°   | 1451.3 | 1443.6 | 1441.9 | 1447.9 | 1450.4 |
| 27.5° | 1418.1 | 1413.9 | 1415.6 | 1414.7 | 1414.7 |
| 30°   | 1382.4 | 1371.4 | 1370.5 | 1370.5 | 1371.4 |
| 32.5° | 1344.2 | 1336.6 | 1335.7 | 1330.6 | 1333.2 |
| 35°   | 1304.3 | 1295.8 | 1289.0 | 1287.3 | 1291.5 |
| 37.5° | 1250.7 | 1240.5 | 1239.7 | 1241.4 | 1241.4 |
| 40°   | 1201.5 | 1190.4 | 1192.1 | 1186.2 | 1193.8 |
| 42.5° | 1147.9 | 1138.6 | 1132.6 | 1130.9 | 1140.3 |
| 45°   | 1103.7 | 1087.6 | 1080.8 | 1077.4 | 1082.5 |
| 47.5° | 1034.1 | 1029.8 | 1023.0 | 1017.1 | 1029.0 |
| 50°   | 976.3  | 978.8  | 962.7  | 956.8  | 962.7  |
| 52.5° | 915.1  | 904.1  | 893.0  | 882.8  | 899.8  |
| 55°   | 845.4  | 836.9  | 826.7  | 821.7  | 831.8  |
| 57.5° | 781.7  | 772.4  | 757.1  | 745.2  | 763.0  |
| 60°   | 711.2  | 702.7  | 686.5  | 673.8  | 695.9  |
| 62.5° | 639.0  | 629.6  | 614.3  | 593.9  | 616.9  |
| 65°   | 559.9  | 554.0  | 531.1  | 517.5  | 536.2  |
| 67.5° | 480.1  | 476.7  | 463.1  | 440.1  | 467.3  |
| 70°   | 406.2  | 399.4  | 383.2  | 362.8  | 389.2  |
| 72.5° | 333.1  | 321.2  | 309.3  | 289.7  | 311.8  |
| 75°   | 253.2  | 249.0  | 237.9  | 217.5  | 237.1  |
| 77.5° | 183.5  | 179.3  | 171.6  | 156.3  | 171.6  |
| 80°   | 119.0  | 118.1  | 112.2  | 101.1  | 112.2  |
| 82.5° | 68.0   | 68.0   | 63.7   | 59.5   | 63.7   |
| 85°   | 32.3   | 30.6   | 28.9   | 27.2   | 28.9   |
| 87.5° | 8.5    | 8.5    | 8.5    | 8.5    | 9.3    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)