

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P183393

Luminaire Tested: **SGI-G-24-4-LD4-2-STD-CA125-FA**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34506)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: SGI-G-24-4-LD4-2-STD-CA125-FA
Description:
Light Source: 2UT217042A8404A
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6310.1 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.34
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

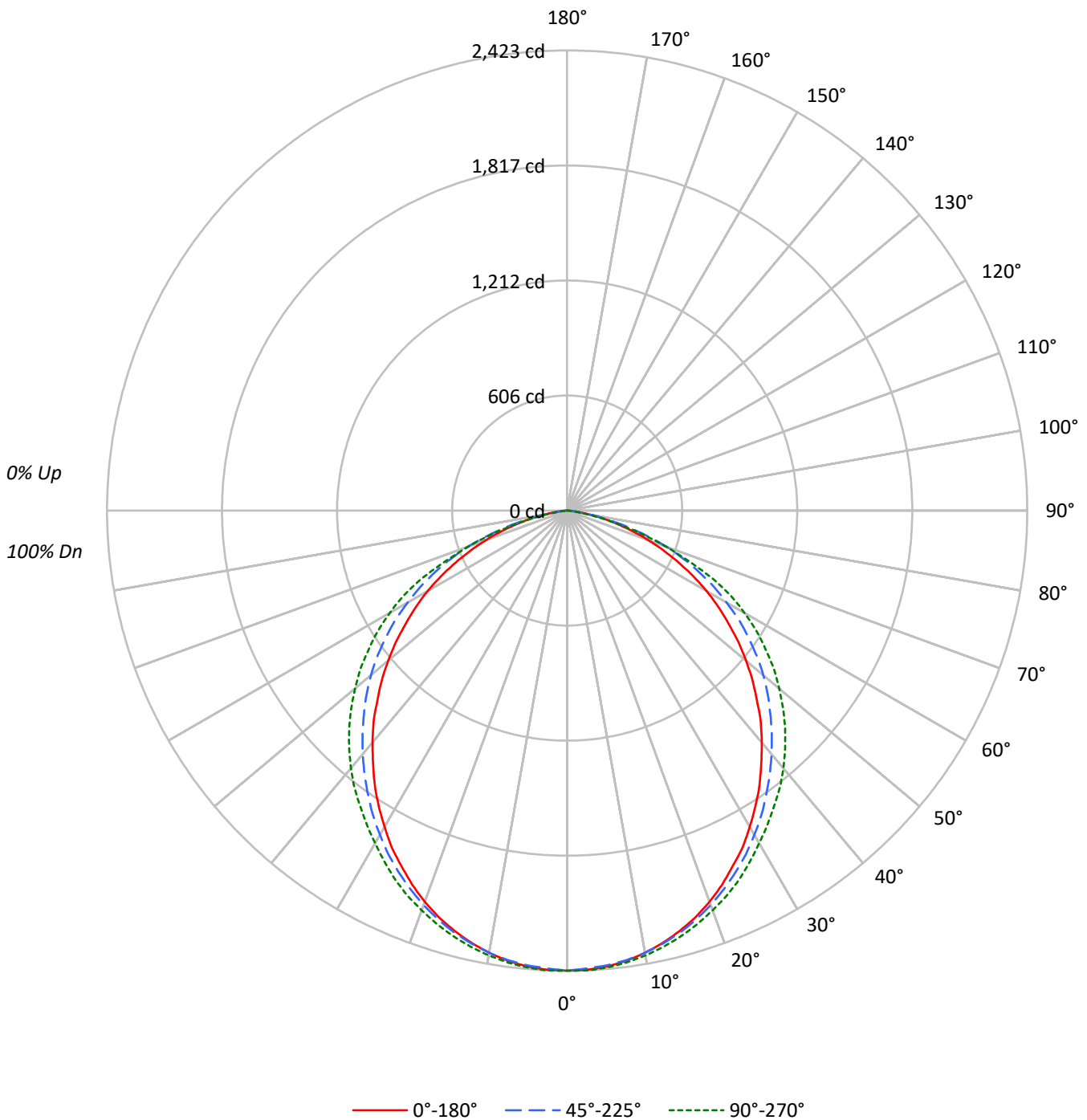
Input Watts (W): 69.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P183393

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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 | 110 | 105 | 101 | 98 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | | 95 | 92 | 90 | | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 86 | 80 | 97 | 90 | 84 | 79 | 87 | 82 | 77 | | 84 | 79 | 76 | | 81 | 77 | 74 | 72 |
| 3 | 91 | 81 | 73 | 67 | 89 | 80 | 72 | 66 | 77 | 70 | 65 | | 74 | 69 | 64 | | 71 | 67 | 63 | 61 |
| 4 | 84 | 72 | 64 | 57 | 81 | 71 | 63 | 57 | 68 | 61 | 56 | | 66 | 60 | 55 | | 64 | 59 | 54 | 52 |
| 5 | 77 | 65 | 56 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | | 59 | 53 | 48 | | 57 | 52 | 47 | 45 |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 49 | 43 | 55 | 48 | 42 | | 54 | 47 | 42 | | 52 | 46 | 42 | 40 |
| 7 | 66 | 53 | 44 | 38 | 64 | 52 | 44 | 38 | 50 | 43 | 38 | | 49 | 42 | 37 | | 48 | 42 | 37 | 35 |
| 8 | 62 | 48 | 40 | 34 | 60 | 47 | 39 | 34 | 46 | 39 | 34 | | 45 | 38 | 33 | | 44 | 38 | 33 | 31 |
| 9 | 57 | 44 | 36 | 31 | 56 | 44 | 36 | 31 | 43 | 35 | 30 | | 41 | 35 | 30 | | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 28 | 53 | 40 | 33 | 28 | 39 | 32 | 28 | | 38 | 32 | 28 | | 38 | 32 | 27 | 26 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3710 | 3710 | 3710 |
| 5° | 3704 | 3696 | 3713 |
| 10° | 3677 | 3677 | 3699 |
| 15° | 3633 | 3646 | 3679 |
| 20° | 3573 | 3603 | 3650 |
| 25° | 3489 | 3549 | 3622 |
| 30° | 3401 | 3488 | 3576 |
| 35° | 3302 | 3417 | 3552 |
| 40° | 3188 | 3347 | 3541 |
| 45° | 3059 | 3276 | 3516 |
| 50° | 2929 | 3215 | 3473 |
| 55° | 2768 | 3110 | 3408 |
| 60° | 2602 | 2971 | 3306 |
| 65° | 2344 | 2775 | 3052 |
| 70° | 2036 | 2484 | 2480 |
| 75° | 1613 | 1894 | 1680 |
| 80° | 1079 | 1093 | 767 |
| 85° | 534 | 360 | 318 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 228.8 | 3.6 |
| 10°-20° | 649.6 | 10.3 |
| 20°-30° | 969.1 | 15.4 |
| 30°-40° | 1146.2 | 18.2 |
| 40°-50° | 1170.7 | 18.6 |
| 50°-60° | 1036.1 | 16.4 |
| 60°-70° | 743.9 | 11.8 |
| 70°-80° | 325.6 | 5.2 |
| 80°-90° | 40.2 | 0.6 |
| 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° | 1847.4 | 29.3 |
| 0°-40° | 2993.7 | 47.4 |
| 0°-60° | 5200.4 | 82.4 |
| 0°-90° | 6310.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6310.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2422 | 2422 | 2422 | 2422 | 2422 | |
| 5° | 2409 | 2410 | 2404 | 2414 | 2415 | 229 |
| 15° | 2291 | 2295 | 2299 | 2316 | 2320 | 646 |
| 25° | 2065 | 2078 | 2100 | 2133 | 2144 | 952 |
| 35° | 1766 | 1786 | 1828 | 1880 | 1900 | 1103 |
| 45° | 1412 | 1444 | 1512 | 1597 | 1623 | 1092 |
| 55° | 1036 | 1070 | 1164 | 1244 | 1276 | 929 |
| 65° | 647 | 686 | 766 | 834 | 842 | 642 |
| 75° | 272 | 298 | 320 | 304 | 284 | 293 |
| 85° | 30 | 30 | 20 | 20 | 18 | 45 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P183393

CATALOG NUMBER: SGI-G-24-4-LD4-2-STD-CA125-FA

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2422.5 | 2422.5 | 2422.5 | 2422.5 | 2422.5 |
| 2.5° | 2420.1 | 2420.9 | 2412.7 | 2421.7 | 2423.4 |
| 5° | 2409.4 | 2410.2 | 2403.7 | 2413.5 | 2415.2 |
| 7.5° | 2391.4 | 2392.2 | 2387.3 | 2397.9 | 2399.6 |
| 10° | 2364.3 | 2365.9 | 2364.3 | 2377.4 | 2378.2 |
| 12.5° | 2330.6 | 2333.1 | 2334.7 | 2349.5 | 2351.1 |
| 15° | 2291.2 | 2295.3 | 2299.4 | 2315.9 | 2320.0 |
| 17.5° | 2245.3 | 2250.2 | 2257.6 | 2278.1 | 2282.2 |
| 20° | 2191.9 | 2196.9 | 2210.8 | 2234.6 | 2239.5 |
| 22.5° | 2132.0 | 2141.1 | 2156.7 | 2187.0 | 2195.2 |
| 25° | 2064.7 | 2077.9 | 2100.0 | 2132.9 | 2143.5 |
| 27.5° | 2000.7 | 2011.4 | 2039.3 | 2075.4 | 2083.6 |
| 30° | 1922.8 | 1943.3 | 1972.0 | 2012.2 | 2022.1 |
| 32.5° | 1845.6 | 1865.3 | 1903.1 | 1945.8 | 1962.2 |
| 35° | 1766.0 | 1786.5 | 1827.6 | 1880.1 | 1899.8 |
| 37.5° | 1678.2 | 1704.5 | 1752.1 | 1814.4 | 1839.9 |
| 40° | 1594.5 | 1619.1 | 1674.1 | 1745.5 | 1771.0 |
| 42.5° | 1509.2 | 1530.5 | 1594.5 | 1673.3 | 1698.7 |
| 45° | 1412.3 | 1444.3 | 1512.4 | 1597.0 | 1623.2 |
| 47.5° | 1324.5 | 1353.2 | 1432.8 | 1514.1 | 1542.0 |
| 50° | 1229.3 | 1259.7 | 1349.1 | 1429.6 | 1457.5 |
| 52.5° | 1135.8 | 1166.1 | 1258.9 | 1338.5 | 1372.9 |
| 55° | 1036.5 | 1070.1 | 1164.5 | 1244.1 | 1276.1 |
| 57.5° | 943.7 | 977.4 | 1073.4 | 1146.4 | 1183.4 |
| 60° | 849.4 | 878.9 | 970.0 | 1048.0 | 1079.1 |
| 62.5° | 748.4 | 783.7 | 871.5 | 944.6 | 972.5 |
| 65° | 646.7 | 686.1 | 765.7 | 833.8 | 842.0 |
| 67.5° | 550.7 | 585.9 | 663.1 | 697.5 | 686.9 |
| 70° | 454.6 | 488.3 | 554.8 | 553.1 | 553.9 |
| 72.5° | 360.3 | 390.6 | 436.6 | 436.6 | 417.7 |
| 75° | 272.5 | 297.9 | 320.1 | 303.6 | 283.9 |
| 77.5° | 190.4 | 216.7 | 219.1 | 190.4 | 178.1 |
| 80° | 122.3 | 140.3 | 123.9 | 101.8 | 87.0 |
| 82.5° | 65.7 | 76.3 | 56.6 | 41.0 | 33.6 |
| 85° | 30.4 | 29.5 | 20.5 | 19.7 | 18.1 |
| 87.5° | 9.8 | 9.8 | 9.8 | 9.8 | 9.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)