

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: P34505

Luminaire Tested: **SGI-G-24-2-LD4-3-HI-CA125-FA**

Test Date: 10/05/15

Test Information

Test Method: LM-79-08
Report Number: P34505
Test Lab: INNOVATION CENTER-P3
Test Date: 10/05/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: SGI-G-24-2-LD4-3-HI-CA125-FA
Description: FAILSAFE SGI LED 2X2 FIXTURE.
Light Source: (126) NICHIA ELM 3500K LED
2UT217042A8404A
Ballast/Driver: (2) OSRAM ELECTRONIC DRIVER
OT50W/PRG1400C/UNV/DIM/L, OT25W/PRG1250C/UNV/DIM

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5478.7 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.25 / 1.33
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

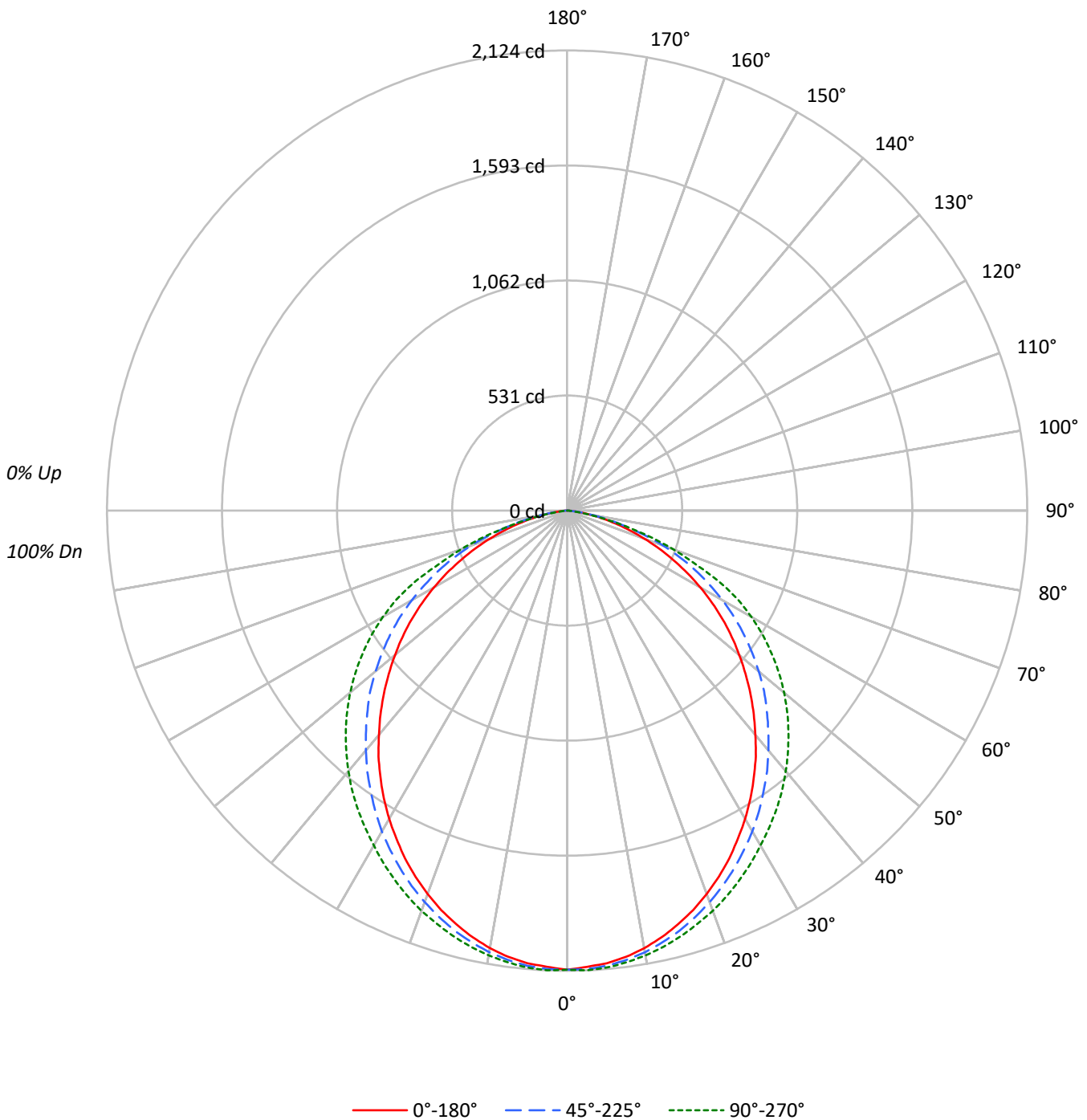
Input Watts (W): 67.5
Input Voltage (V): 120.0
Input Current (Ain): 0.564
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 6.61%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 5 HR
Ambient Temperature (°C): 25.0
Test Distance: 25 FT



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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 | 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 | | 83 | 79 | 76 | | 80 | 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 | 64 | 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° | 6786 | 6786 | 6786 |
| 5° | 6741 | 6780 | 6806 |
| 10° | 6670 | 6731 | 6780 |
| 15° | 6555 | 6654 | 6740 |
| 20° | 6417 | 6554 | 6700 |
| 25° | 6258 | 6442 | 6650 |
| 30° | 6076 | 6323 | 6601 |
| 35° | 5876 | 6181 | 6584 |
| 40° | 5648 | 6041 | 6563 |
| 45° | 5421 | 5901 | 6544 |
| 50° | 5167 | 5749 | 6512 |
| 55° | 4897 | 5561 | 6438 |
| 60° | 4548 | 5303 | 6290 |
| 65° | 4092 | 4948 | 5850 |
| 70° | 3558 | 4420 | 4888 |
| 75° | 2846 | 3415 | 3427 |
| 80° | 1973 | 2158 | 1660 |
| 85° | 1029 | 919 | 625 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 200.0 | 3.6 |
| 10°-20° | 565.5 | 10.3 |
| 20°-30° | 840.4 | 15.3 |
| 30°-40° | 992.8 | 18.1 |
| 40°-50° | 1011.6 | 18.5 |
| 50°-60° | 898.2 | 16.4 |
| 60°-70° | 645.0 | 11.8 |
| 70°-80° | 286.7 | 5.2 |
| 80°-90° | 38.7 | 0.7 |
| 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° | 1605.8 | 29.3 |
| 0°-40° | 2598.6 | 47.4 |
| 0°-60° | 4508.4 | 82.3 |
| 0°-90° | 5478.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5478.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2119 | 2119 | 2119 | 2119 | 2119 | |
| 5° | 2097 | 2101 | 2109 | 2115 | 2117 | 199 |
| 15° | 1977 | 1986 | 2007 | 2027 | 2033 | 557 |
| 25° | 1771 | 1787 | 1823 | 1864 | 1882 | 815 |
| 35° | 1503 | 1523 | 1581 | 1649 | 1684 | 940 |
| 45° | 1197 | 1223 | 1303 | 1399 | 1445 | 923 |
| 55° | 877 | 915 | 996 | 1102 | 1153 | 783 |
| 65° | 540 | 581 | 653 | 741 | 772 | 537 |
| 75° | 230 | 251 | 276 | 282 | 277 | 247 |
| 85° | 28 | 30 | 25 | 20 | 17 | 42 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P34505

CATALOG NUMBER: SGI-G-24-2-LD4-3-HI-CA125-FA

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|------|-------|------|-------|------|
| 0° | 2119 | 2119 | 2119 | 2119 | 2119 |
| 2.5° | 2108 | 2111 | 2118 | 2122 | 2124 |
| 5° | 2097 | 2101 | 2109 | 2115 | 2117 |
| 7.5° | 2078 | 2082 | 2092 | 2101 | 2103 |
| 10° | 2051 | 2056 | 2070 | 2082 | 2085 |
| 12.5° | 2017 | 2024 | 2040 | 2056 | 2061 |
| 15° | 1977 | 1986 | 2007 | 2027 | 2033 |
| 17.5° | 1933 | 1943 | 1967 | 1990 | 2000 |
| 20° | 1883 | 1894 | 1923 | 1954 | 1966 |
| 22.5° | 1829 | 1842 | 1875 | 1910 | 1926 |
| 25° | 1771 | 1787 | 1823 | 1864 | 1882 |
| 27.5° | 1707 | 1723 | 1767 | 1814 | 1836 |
| 30° | 1643 | 1659 | 1710 | 1760 | 1785 |
| 32.5° | 1575 | 1595 | 1647 | 1706 | 1735 |
| 35° | 1503 | 1523 | 1581 | 1649 | 1684 |
| 37.5° | 1430 | 1451 | 1516 | 1592 | 1630 |
| 40° | 1351 | 1378 | 1445 | 1529 | 1570 |
| 42.5° | 1275 | 1300 | 1374 | 1466 | 1509 |
| 45° | 1197 | 1223 | 1303 | 1399 | 1445 |
| 47.5° | 1117 | 1146 | 1233 | 1328 | 1378 |
| 50° | 1037 | 1068 | 1154 | 1255 | 1307 |
| 52.5° | 958 | 995 | 1076 | 1180 | 1233 |
| 55° | 877 | 915 | 996 | 1102 | 1153 |
| 57.5° | 794 | 831 | 914 | 1017 | 1072 |
| 60° | 710 | 749 | 828 | 925 | 982 |
| 62.5° | 627 | 662 | 740 | 835 | 888 |
| 65° | 540 | 581 | 653 | 741 | 772 |
| 67.5° | 462 | 493 | 563 | 618 | 633 |
| 70° | 380 | 407 | 472 | 499 | 522 |
| 72.5° | 303 | 325 | 371 | 390 | 398 |
| 75° | 230 | 251 | 276 | 282 | 277 |
| 77.5° | 162 | 182 | 193 | 183 | 172 |
| 80° | 107 | 119 | 117 | 101 | 90 |
| 82.5° | 62 | 67 | 58 | 42 | 34 |
| 85° | 28 | 30 | 25 | 20 | 17 |
| 87.5° | 11 | 12 | 10 | 8 | 7 |
| 90° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)