

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: CORELITE

Report Number: P844969

Luminaire Tested: **SQ4P-F-150U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844969
REPORT IS A COMBINATION OF REPORTS P700136 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-150U-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

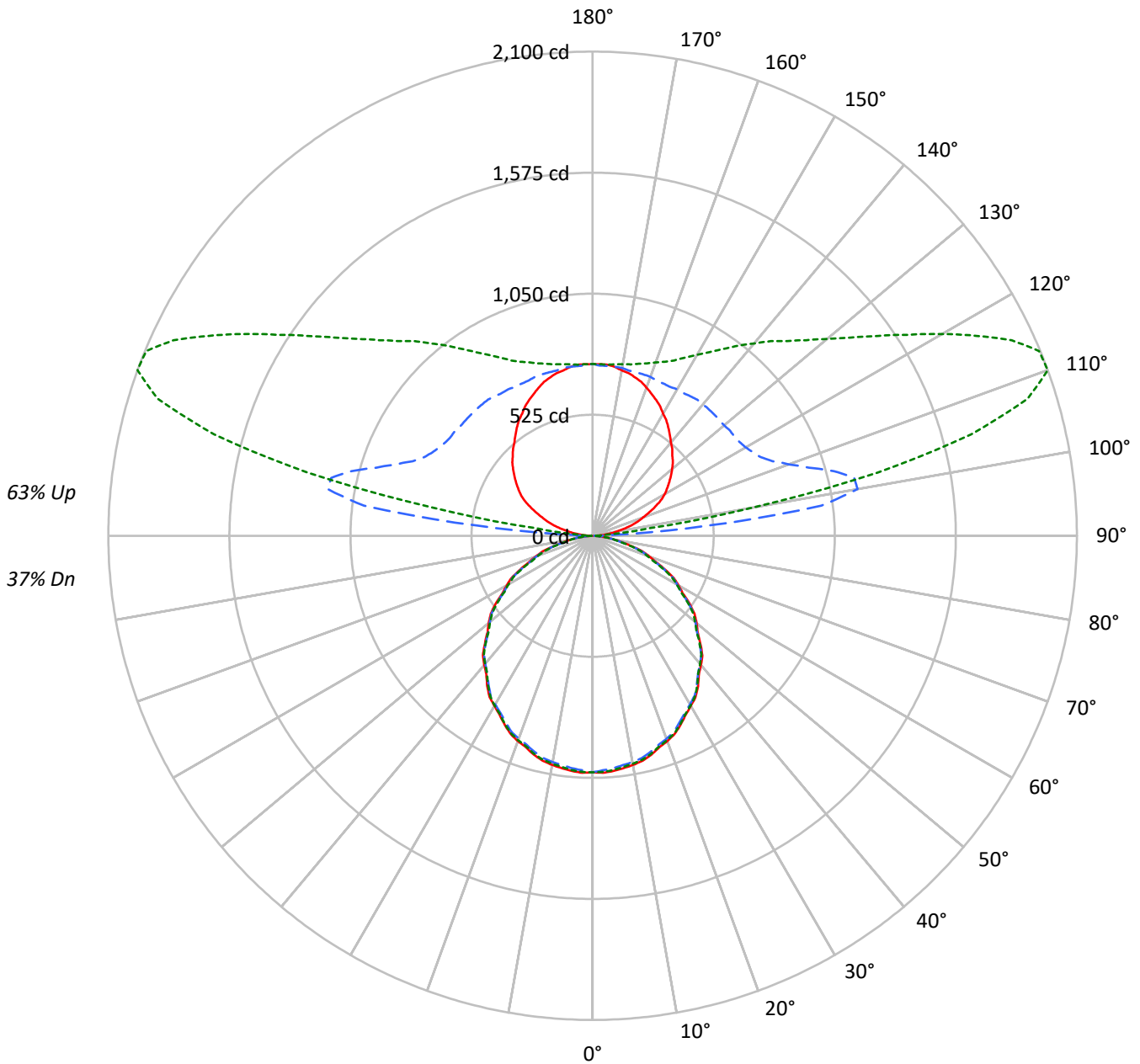
Lumens per Lamp: N/A
Luminaire Lumens: 7633.9 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 68.6
Input Voltage (V): NR
Input Current (A_{in}): 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: P844969

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 50 | | | | | | | | | 30 | | | | | | | | | 10 | | | | | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 59 | 59 | 59 | 44 | 44 | 44 | 37 | | | | | | | | | | | | | | | | | | | |
| 1 | 95 | 91 | 87 | 83 | 86 | 82 | 79 | 76 | 66 | 64 | 62 | 52 | 51 | 49 | 39 | 38 | 37 | 31 | | | | | | | | | | | | | | | | | | | |
| 2 | 86 | 79 | 73 | 68 | 78 | 72 | 67 | 62 | 58 | 55 | 51 | 46 | 43 | 41 | 34 | 32 | 31 | 26 | | | | | | | | | | | | | | | | | | | |
| 3 | 79 | 69 | 62 | 56 | 71 | 63 | 57 | 52 | 51 | 47 | 43 | 40 | 37 | 35 | 30 | 28 | 26 | 22 | | | | | | | | | | | | | | | | | | | |
| 4 | 72 | 61 | 53 | 48 | 65 | 56 | 49 | 44 | 45 | 40 | 37 | 36 | 32 | 29 | 27 | 25 | 23 | 19 | | | | | | | | | | | | | | | | | | | |
| 5 | 66 | 54 | 46 | 41 | 59 | 50 | 43 | 37 | 40 | 35 | 31 | 32 | 28 | 25 | 24 | 22 | 20 | 16 | | | | | | | | | | | | | | | | | | | |
| 6 | 61 | 49 | 41 | 35 | 55 | 44 | 37 | 32 | 36 | 31 | 27 | 29 | 25 | 22 | 22 | 19 | 17 | 14 | | | | | | | | | | | | | | | | | | | |
| 7 | 56 | 44 | 36 | 31 | 50 | 40 | 33 | 28 | 33 | 28 | 24 | 26 | 22 | 20 | 20 | 17 | 15 | 12 | | | | | | | | | | | | | | | | | | | |
| 8 | 52 | 40 | 32 | 27 | 47 | 36 | 30 | 25 | 30 | 25 | 21 | 24 | 20 | 17 | 18 | 16 | 14 | 11 | | | | | | | | | | | | | | | | | | | |
| 9 | 48 | 36 | 29 | 24 | 44 | 33 | 27 | 22 | 27 | 22 | 19 | 22 | 18 | 16 | 17 | 14 | 12 | 10 | | | | | | | | | | | | | | | | | | | |
| 10 | 45 | 33 | 26 | 21 | 41 | 30 | 24 | 20 | 25 | 20 | 17 | 20 | 17 | 14 | 16 | 13 | 11 | 9 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 9464 | 9464 | 9464 |
| 5° | 9489 | 9374 | 9450 |
| 10° | 9456 | 9340 | 9405 |
| 15° | 9392 | 9274 | 9353 |
| 20° | 9303 | 9196 | 9264 |
| 25° | 9199 | 9087 | 9172 |
| 30° | 9071 | 8997 | 9055 |
| 35° | 8973 | 8864 | 8909 |
| 40° | 8802 | 8716 | 8734 |
| 45° | 8618 | 8548 | 8548 |
| 50° | 8437 | 8359 | 8319 |
| 55° | 8241 | 8130 | 8086 |
| 60° | 7933 | 7805 | 7756 |
| 65° | 7556 | 7405 | 7313 |
| 70° | 7041 | 6887 | 6741 |
| 75° | 6313 | 6121 | 5971 |
| 80° | 5111 | 5042 | 4888 |
| 85° | 3038 | 3493 | 3631 |



TEST NUMBER: P844969

CATALOG NUMBER: SQ4P-F-150U-075D-B50-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 96.8 | 1.3 |
| 10°-20° | 275.6 | 3.6 |
| 20°-30° | 414.0 | 5.4 |
| 30°-40° | 494.2 | 6.5 |
| 40°-50° | 506.4 | 6.6 |
| 50°-60° | 451.6 | 5.9 |
| 60°-70° | 336.3 | 4.4 |
| 70°-80° | 182.6 | 2.4 |
| 80°-90° | 44.1 | 0.6 |
| 90°-100° | 296.3 | 3.9 |
| 100°-110° | 1031.0 | 13.5 |
| 110°-120° | 998.8 | 13.1 |
| 120°-130° | 783.5 | 10.3 |
| 130°-140° | 620.1 | 8.1 |
| 140°-150° | 478.6 | 6.3 |
| 150°-160° | 343.1 | 4.5 |
| 160°-170° | 209.8 | 2.7 |
| 170°-180° | 71.0 | 0.9 |
| 0°-30° | 786.4 | 10.3 |
| 0°-40° | 1280.6 | 16.8 |
| 0°-60° | 2238.7 | 29.3 |
| 0°-90° | 2801.7 | 36.7 |
| 90°-120° | 2326.1 | 30.5 |
| 90°-150° | 4208.3 | 55.1 |
| 90°-180° | 4832.0 | 63.3 |
| 0°-180° | 7633.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1026 | 1026 | 1026 | 1026 | 1026 | |
| 5° | 1025 | 1023 | 1012 | 1022 | 1020 | 97 |
| 15° | 983 | 980 | 971 | 979 | 979 | 277 |
| 25° | 904 | 901 | 893 | 898 | 901 | 416 |
| 35° | 797 | 794 | 787 | 787 | 791 | 497 |
| 45° | 660 | 662 | 655 | 654 | 655 | 510 |
| 55° | 512 | 512 | 505 | 501 | 503 | 456 |
| 65° | 346 | 345 | 339 | 335 | 335 | 343 |
| 75° | 177 | 176 | 172 | 169 | 168 | 187 |
| 85° | 29 | 31 | 33 | 34 | 34 | 40 |
| 90° | 11 | 17 | 17 | 11 | 6 | 8 |
| 95° | 50 | 172 | 500 | 128 | 78 | 53 |
| 105° | 172 | 244 | 1084 | 1828 | 1700 | 181 |
| 115° | 300 | 361 | 806 | 1700 | 2006 | 296 |
| 125° | 406 | 500 | 750 | 1267 | 1511 | 363 |
| 135° | 489 | 550 | 745 | 1056 | 1195 | 379 |
| 145° | 572 | 611 | 739 | 911 | 989 | 358 |
| 155° | 650 | 672 | 728 | 811 | 839 | 300 |
| 165° | 711 | 717 | 733 | 767 | 772 | 201 |
| 175° | 745 | 745 | 739 | 750 | 745 | 71 |
| 180° | 745 | 745 | 745 | 745 | 745 | |



TEST NUMBER: P844969

CATALOG NUMBER: SQ4P-F-150U-075D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1025.8 | 1025.8 | 1025.8 | 1025.8 | 1025.8 |
| 2.5° | 1029.0 | 1026.9 | 1018.2 | 1025.8 | 1024.9 |
| 5° | 1024.6 | 1023.1 | 1012.2 | 1021.7 | 1020.4 |
| 7.5° | 1017.0 | 1014.5 | 1003.5 | 1013.0 | 1011.6 |
| 10° | 1009.3 | 1006.6 | 997.0 | 1005.1 | 1003.9 |
| 12.5° | 999.5 | 997.9 | 987.2 | 995.4 | 995.1 |
| 15° | 983.3 | 980.5 | 970.9 | 979.2 | 979.2 |
| 17.5° | 961.9 | 960.3 | 950.8 | 958.7 | 957.9 |
| 20° | 947.5 | 944.9 | 936.6 | 943.5 | 943.5 |
| 22.5° | 930.0 | 928.4 | 920.2 | 925.8 | 927.0 |
| 25° | 903.6 | 901.0 | 892.6 | 898.2 | 901.0 |
| 27.5° | 874.5 | 872.4 | 865.6 | 869.1 | 871.0 |
| 30° | 851.5 | 851.5 | 844.5 | 846.0 | 850.0 |
| 32.5° | 830.6 | 830.6 | 822.6 | 824.1 | 826.0 |
| 35° | 796.7 | 793.9 | 787.0 | 787.0 | 791.0 |
| 37.5° | 756.9 | 755.6 | 751.2 | 750.5 | 751.6 |
| 40° | 730.8 | 729.3 | 723.7 | 725.2 | 725.2 |
| 42.5° | 704.3 | 702.9 | 697.3 | 695.5 | 697.5 |
| 45° | 660.5 | 661.9 | 655.1 | 653.7 | 655.1 |
| 47.5° | 617.6 | 617.6 | 612.0 | 608.2 | 610.2 |
| 50° | 587.8 | 587.8 | 582.4 | 579.6 | 579.6 |
| 52.5° | 557.0 | 558.1 | 551.4 | 547.7 | 548.8 |
| 55° | 512.3 | 512.3 | 505.4 | 501.3 | 502.7 |
| 57.5° | 462.8 | 462.8 | 456.0 | 451.8 | 454.2 |
| 60° | 429.9 | 429.9 | 423.0 | 418.8 | 420.3 |
| 62.5° | 396.9 | 396.9 | 390.1 | 386.0 | 386.1 |
| 65° | 346.1 | 344.8 | 339.2 | 335.0 | 335.0 |
| 67.5° | 297.1 | 293.6 | 289.5 | 284.0 | 284.0 |
| 70° | 261.0 | 259.5 | 255.3 | 249.9 | 249.9 |
| 72.5° | 227.9 | 225.5 | 221.3 | 217.1 | 217.1 |
| 75° | 177.1 | 175.6 | 171.7 | 169.0 | 167.5 |
| 77.5° | 126.9 | 125.9 | 125.5 | 121.7 | 122.8 |
| 80° | 96.2 | 96.2 | 94.9 | 92.0 | 92.0 |
| 82.5° | 68.6 | 69.7 | 67.3 | 66.6 | 65.6 |
| 85° | 28.7 | 31.4 | 33.0 | 34.3 | 34.3 |
| 87.5° | 5.6 | 8.7 | 7.7 | 8.9 | 8.9 |
| 90° | 11.1 | 16.7 | 16.7 | 11.1 | 5.5 |
| 92.5° | 27.8 | 83.3 | 77.8 | 33.3 | 27.8 |
| 95° | 50.0 | 172.2 | 500.1 | 127.8 | 77.8 |
| 97.5° | 77.8 | 194.5 | 1000.2 | 455.6 | 244.5 |
| 100° | 105.6 | 205.5 | 1166.9 | 1094.6 | 705.6 |
| 102.5° | 138.9 | 222.3 | 1161.3 | 1539.1 | 1266.9 |
| 105° | 172.2 | 244.5 | 1083.5 | 1828.1 | 1700.3 |



TEST NUMBER: P844969

CATALOG NUMBER: SQ4P-F-150U-075D-B50-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 266.7 | 327.9 | 844.5 | 1839.2 | 2094.7 |
| 115° | 300.1 | 361.2 | 805.7 | 1700.3 | 2005.9 |
| 117.5° | 333.4 | 400.0 | 783.4 | 1572.5 | 1878.1 |
| 120° | 361.2 | 433.4 | 766.8 | 1450.2 | 1750.3 |
| 122.5° | 383.4 | 466.8 | 755.7 | 1350.3 | 1622.4 |
| 125° | 405.7 | 500.1 | 750.1 | 1266.9 | 1511.3 |
| 127.5° | 427.8 | 522.3 | 750.1 | 1205.7 | 1411.4 |
| 130° | 450.1 | 533.4 | 744.6 | 1144.6 | 1328.0 |
| 132.5° | 472.3 | 538.9 | 744.6 | 1100.2 | 1255.7 |
| 135° | 489.0 | 550.1 | 744.6 | 1055.7 | 1194.6 |
| 137.5° | 511.2 | 561.2 | 744.6 | 1016.9 | 1144.6 |
| 140° | 527.9 | 577.9 | 744.6 | 977.9 | 1089.0 |
| 142.5° | 550.1 | 594.5 | 744.6 | 939.1 | 1039.0 |
| 145° | 572.4 | 611.2 | 739.0 | 911.3 | 989.1 |
| 147.5° | 594.5 | 627.9 | 733.4 | 883.5 | 944.6 |
| 150° | 611.2 | 644.5 | 733.4 | 855.7 | 905.7 |
| 152.5° | 633.5 | 661.2 | 727.9 | 827.9 | 872.3 |
| 155° | 650.1 | 672.3 | 727.9 | 811.2 | 839.0 |
| 157.5° | 666.8 | 689.0 | 727.9 | 794.6 | 816.8 |
| 160° | 683.5 | 700.1 | 733.4 | 783.4 | 800.1 |
| 162.5° | 700.1 | 711.3 | 733.4 | 772.4 | 783.4 |
| 165° | 711.3 | 716.8 | 733.4 | 766.8 | 772.4 |
| 167.5° | 722.3 | 727.9 | 733.4 | 761.2 | 761.2 |
| 170° | 727.9 | 733.4 | 739.0 | 755.7 | 755.7 |
| 172.5° | 739.0 | 739.0 | 739.0 | 750.1 | 750.1 |
| 175° | 744.6 | 744.6 | 739.0 | 750.1 | 744.6 |
| 177.5° | 744.6 | 744.6 | 739.0 | 750.1 | 744.6 |
| 180° | 744.6 | 744.6 | 744.6 | 744.6 | 744.6 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







| | | | | | |
|--------|-------|-------|-------|--------|--------|
| 107.5° | 205.5 | 272.3 | 983.5 | 1955.8 | 1978.1 |
| 110° | 233.3 | 300.1 | 905.7 | 1939.2 | 2100.4 |



(END OF REPORT)