

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

(formerly Eaton)

Brand: CORELITE

Report Number: P564951

Luminaire Tested: **SQ4-PW1-100U-075D-940-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564951
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-075D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

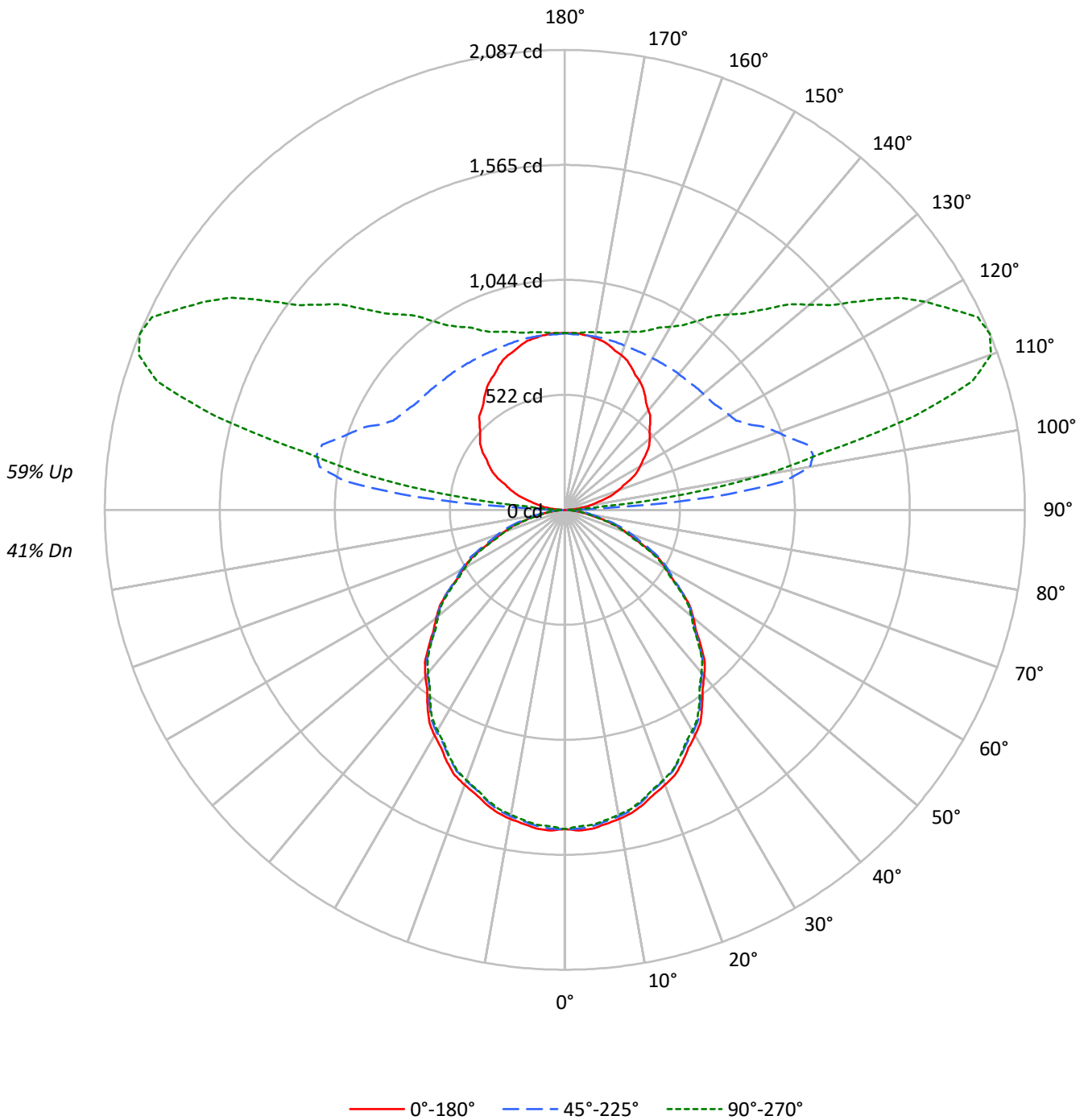
Lumens per Lamp: N/A
Luminaire Lumens: 8894.6 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78
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 | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 63 | 63 | 63 | 48 | 48 | 48 | 41 |
| 1 | 96 | 92 | 88 | 85 | 87 | 84 | 81 | 78 | 69 | 67 | 65 | 55 | 54 | 52 | 43 | 42 | 41 | 35 |
| 2 | 87 | 80 | 74 | 69 | 79 | 73 | 68 | 64 | 60 | 57 | 54 | 49 | 46 | 44 | 38 | 36 | 35 | 30 |
| 3 | 80 | 70 | 63 | 58 | 72 | 65 | 58 | 53 | 53 | 49 | 45 | 43 | 40 | 37 | 33 | 31 | 29 | 25 |
| 4 | 73 | 62 | 55 | 49 | 66 | 57 | 50 | 45 | 47 | 42 | 38 | 38 | 35 | 32 | 30 | 27 | 25 | 22 |
| 5 | 67 | 55 | 48 | 42 | 61 | 51 | 44 | 39 | 42 | 37 | 33 | 34 | 31 | 28 | 27 | 24 | 22 | 19 |
| 6 | 62 | 50 | 42 | 36 | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 31 | 27 | 24 | 24 | 22 | 19 | 16 |
| 7 | 57 | 45 | 37 | 32 | 52 | 41 | 34 | 29 | 35 | 29 | 25 | 28 | 24 | 21 | 22 | 19 | 17 | 15 |
| 8 | 53 | 41 | 33 | 28 | 48 | 37 | 31 | 26 | 31 | 26 | 22 | 26 | 22 | 19 | 20 | 18 | 15 | 13 |
| 9 | 49 | 37 | 30 | 25 | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 16 | 14 | 12 |
| 10 | 46 | 34 | 27 | 22 | 42 | 31 | 25 | 21 | 26 | 21 | 18 | 22 | 18 | 15 | 18 | 15 | 13 | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8908 | 8908 | 8908 |
| 5° | 8966 | 8895 | 8856 |
| 10° | 8894 | 8823 | 8775 |
| 15° | 8800 | 8703 | 8670 |
| 20° | 8695 | 8562 | 8545 |
| 25° | 8574 | 8417 | 8392 |
| 30° | 8392 | 8266 | 8211 |
| 35° | 8154 | 8039 | 7991 |
| 40° | 7899 | 7776 | 7746 |
| 45° | 7592 | 7492 | 7459 |
| 50° | 7277 | 7216 | 7167 |
| 55° | 6938 | 6938 | 6829 |
| 60° | 6515 | 6640 | 6404 |
| 65° | 5961 | 6258 | 5813 |
| 70° | 5255 | 5760 | 5118 |
| 75° | 4489 | 5155 | 4368 |
| 80° | 3482 | 4339 | 3524 |
| 85° | 2251 | 3331 | 2971 |



TEST NUMBER: P564951

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 136.4 | 1.5 |
| 10°-20° | 385.0 | 4.3 |
| 20°-30° | 571.2 | 6.4 |
| 30°-40° | 668.3 | 7.5 |
| 40°-50° | 665.3 | 7.5 |
| 50°-60° | 574.5 | 6.5 |
| 60°-70° | 413.6 | 4.6 |
| 70°-80° | 216.9 | 2.4 |
| 80°-90° | 55.4 | 0.6 |
| 90°-100° | 375.4 | 4.2 |
| 100°-110° | 1036.3 | 11.7 |
| 110°-120° | 1068.7 | 12.0 |
| 120°-130° | 858.8 | 9.7 |
| 130°-140° | 674.9 | 7.6 |
| 140°-150° | 517.7 | 5.8 |
| 150°-160° | 372.0 | 4.2 |
| 160°-170° | 227.5 | 2.6 |
| 170°-180° | 76.7 | 0.9 |
| 0°-30° | 1092.6 | 12.3 |
| 0°-40° | 1760.9 | 19.8 |
| 0°-60° | 3000.7 | 33.7 |
| 0°-90° | 3686.6 | 41.4 |
| 90°-120° | 2480.4 | 27.9 |
| 90°-150° | 4531.8 | 50.9 |
| 90°-180° | 5208.0 | 58.6 |
| 0°-180° | 8894.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1448 | 1448 | 1448 | 1448 | 1448 | |
| 5° | 1452 | 1436 | 1441 | 1437 | 1434 | 138 |
| 15° | 1382 | 1364 | 1367 | 1364 | 1362 | 390 |
| 25° | 1263 | 1242 | 1240 | 1233 | 1236 | 581 |
| 35° | 1086 | 1071 | 1071 | 1060 | 1064 | 679 |
| 45° | 873 | 865 | 861 | 859 | 858 | 673 |
| 55° | 647 | 646 | 647 | 638 | 637 | 577 |
| 65° | 410 | 422 | 430 | 413 | 399 | 406 |
| 75° | 189 | 206 | 217 | 202 | 184 | 202 |
| 85° | 32 | 42 | 47 | 45 | 42 | 42 |
| 90° | 3 | 5 | 10 | 12 | 13 | 5 |
| 95° | 55 | 203 | 681 | 280 | 182 | 59 |
| 105° | 185 | 285 | 1140 | 1741 | 1639 | 196 |
| 115° | 331 | 400 | 918 | 1818 | 2067 | 325 |
| 125° | 454 | 517 | 832 | 1409 | 1653 | 404 |
| 135° | 546 | 605 | 809 | 1141 | 1286 | 423 |
| 145° | 634 | 677 | 799 | 971 | 1045 | 397 |
| 155° | 714 | 738 | 793 | 871 | 899 | 329 |
| 165° | 773 | 783 | 796 | 827 | 834 | 218 |
| 175° | 802 | 803 | 798 | 809 | 807 | 76 |
| 180° | 802 | 802 | 802 | 802 | 802 | |

TEST NUMBER: P564951

CATALOG NUMBER: SQ4-PW1-100U-075D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1448.3 | 1448.3 | 1448.3 | 1448.3 | 1448.3 |
| 2.5° | 1456.5 | 1444.5 | 1448.3 | 1445.1 | 1438.1 |
| 5° | 1452.2 | 1435.9 | 1440.7 | 1436.8 | 1434.3 |
| 7.5° | 1437.3 | 1422.4 | 1425.9 | 1421.7 | 1420.2 |
| 10° | 1424.1 | 1409.1 | 1412.6 | 1407.4 | 1404.9 |
| 12.5° | 1408.8 | 1392.8 | 1396.3 | 1391.1 | 1389.6 |
| 15° | 1382.0 | 1364.5 | 1366.7 | 1364.0 | 1361.6 |
| 17.5° | 1350.8 | 1333.1 | 1333.5 | 1329.4 | 1328.9 |
| 20° | 1328.4 | 1309.7 | 1308.0 | 1302.9 | 1305.4 |
| 22.5° | 1303.9 | 1284.2 | 1282.4 | 1275.4 | 1278.9 |
| 25° | 1263.3 | 1242.1 | 1240.3 | 1232.8 | 1236.5 |
| 27.5° | 1216.3 | 1195.4 | 1195.4 | 1184.8 | 1188.8 |
| 30° | 1181.6 | 1161.7 | 1163.8 | 1151.1 | 1156.1 |
| 32.5° | 1144.9 | 1126.9 | 1128.0 | 1115.4 | 1120.4 |
| 35° | 1085.9 | 1071.0 | 1070.6 | 1060.5 | 1064.2 |
| 37.5° | 1025.7 | 1012.5 | 1010.4 | 1004.5 | 1005.5 |
| 40° | 983.8 | 972.6 | 968.5 | 964.7 | 964.7 |
| 42.5° | 939.9 | 929.7 | 925.7 | 922.8 | 921.8 |
| 45° | 872.8 | 865.3 | 861.3 | 858.8 | 857.5 |
| 47.5° | 806.5 | 799.5 | 796.0 | 794.2 | 792.9 |
| 50° | 760.5 | 755.5 | 754.1 | 750.3 | 749.0 |
| 52.5° | 714.6 | 711.6 | 710.3 | 705.4 | 704.1 |
| 55° | 647.0 | 645.7 | 647.0 | 638.0 | 636.8 |
| 57.5° | 576.5 | 578.5 | 582.6 | 570.6 | 567.6 |
| 60° | 529.6 | 534.6 | 539.8 | 525.6 | 520.6 |
| 62.5° | 481.6 | 489.6 | 496.9 | 480.7 | 473.7 |
| 65° | 409.6 | 422.1 | 430.0 | 413.1 | 399.4 |
| 67.5° | 340.2 | 355.7 | 365.2 | 347.0 | 331.5 |
| 70° | 292.2 | 309.7 | 320.3 | 302.0 | 284.6 |
| 72.5° | 250.4 | 269.8 | 278.4 | 261.2 | 243.7 |
| 75° | 188.9 | 206.3 | 216.9 | 202.5 | 183.8 |
| 77.5° | 134.0 | 150.5 | 159.3 | 146.6 | 131.2 |
| 80° | 98.3 | 115.7 | 122.5 | 112.0 | 99.5 |
| 82.5° | 69.7 | 84.1 | 88.8 | 82.5 | 74.0 |
| 85° | 31.9 | 41.9 | 47.2 | 44.6 | 42.1 |
| 87.5° | 8.7 | 16.2 | 21.4 | 21.7 | 23.0 |
| 90° | 2.6 | 5.1 | 10.3 | 11.6 | 12.8 |
| 92.5° | 23.1 | 95.8 | 171.3 | 62.5 | 48.7 |
| 95° | 55.1 | 203.1 | 681.0 | 279.9 | 182.1 |
| 97.5° | 91.3 | 227.5 | 1008.8 | 776.7 | 562.5 |
| 100° | 118.0 | 242.1 | 1129.9 | 1137.8 | 924.7 |
| 102.5° | 143.6 | 258.8 | 1153.5 | 1405.9 | 1203.7 |
| 105° | 184.7 | 285.0 | 1140.1 | 1740.6 | 1639.0 |
| 107.5° | 228.3 | 317.6 | 1076.5 | 1902.0 | 1939.1 |
| 110° | 259.1 | 339.3 | 1027.3 | 1936.7 | 2057.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 286.8 | 364.0 | 981.1 | 1909.3 | 2086.8 |
| 115° | 330.9 | 399.8 | 918.3 | 1817.8 | 2067.4 |
| 117.5° | 369.4 | 438.1 | 877.0 | 1689.1 | 1973.0 |
| 120° | 395.0 | 462.7 | 860.5 | 1601.9 | 1887.8 |
| 122.5° | 419.6 | 484.3 | 847.2 | 1520.5 | 1791.4 |
| 125° | 454.0 | 516.7 | 832.3 | 1408.6 | 1653.1 |
| 127.5° | 483.2 | 545.9 | 823.6 | 1313.9 | 1524.9 |
| 130° | 502.7 | 565.4 | 819.5 | 1256.1 | 1447.9 |
| 132.5° | 521.2 | 580.9 | 815.4 | 1207.4 | 1381.2 |
| 135° | 546.3 | 605.3 | 809.2 | 1140.9 | 1286.3 |
| 137.5° | 574.6 | 628.2 | 806.2 | 1085.0 | 1209.1 |
| 140° | 589.9 | 642.6 | 804.1 | 1047.7 | 1156.8 |
| 142.5° | 607.4 | 656.0 | 802.1 | 1014.6 | 1110.6 |
| 145° | 633.5 | 677.4 | 799.0 | 971.2 | 1045.2 |
| 147.5° | 658.7 | 697.1 | 796.2 | 934.7 | 992.1 |
| 150° | 677.1 | 708.5 | 795.1 | 912.9 | 959.3 |
| 152.5° | 691.5 | 720.9 | 794.1 | 894.2 | 932.6 |
| 155° | 714.3 | 738.2 | 792.6 | 871.4 | 899.0 |
| 157.5° | 735.4 | 753.7 | 792.8 | 854.8 | 873.6 |
| 160° | 747.7 | 764.0 | 793.9 | 845.5 | 859.3 |
| 162.5° | 757.9 | 772.2 | 794.9 | 837.2 | 848.0 |
| 165° | 773.3 | 783.4 | 796.4 | 827.3 | 833.6 |
| 167.5° | 785.1 | 791.2 | 797.7 | 821.3 | 823.4 |
| 170° | 791.3 | 796.3 | 797.7 | 818.2 | 818.2 |
| 172.5° | 796.4 | 799.4 | 797.7 | 814.1 | 813.1 |
| 175° | 801.5 | 802.8 | 797.7 | 809.2 | 806.7 |
| 177.5° | 803.6 | 802.6 | 797.4 | 804.6 | 802.6 |
| 180° | 801.5 | 801.5 | 801.5 | 801.5 | 801.5 |

(END OF REPORT)