

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: P564661

Luminaire Tested: **SQ4-PW1-050U-075D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564661
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12538.8 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

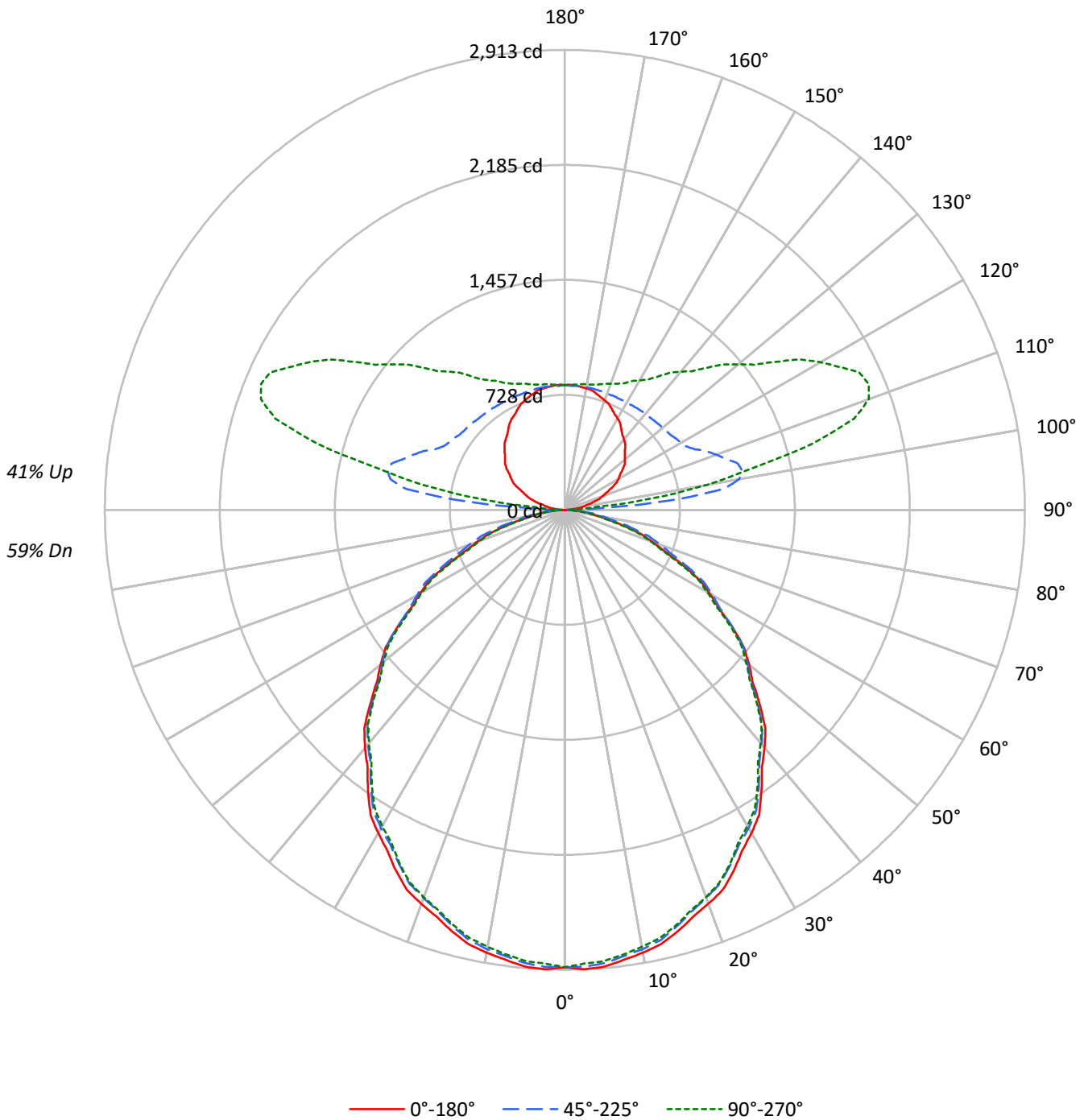
Input Watts (W): 105.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P564661

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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 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 76 | 76 | 76 | 64 | 64 | 64 | 59 |
| 1 | 100 | 96 | 92 | 88 | 93 | 89 | 86 | 83 | 78 | 75 | 73 | 67 | 65 | 63 | 57 | 56 | 55 | 50 |
| 2 | 91 | 84 | 77 | 72 | 85 | 78 | 73 | 68 | 68 | 64 | 60 | 59 | 56 | 53 | 50 | 48 | 46 | 42 |
| 3 | 83 | 74 | 66 | 60 | 77 | 69 | 62 | 57 | 60 | 55 | 51 | 52 | 48 | 45 | 45 | 42 | 39 | 36 |
| 4 | 76 | 65 | 57 | 51 | 71 | 61 | 54 | 48 | 54 | 48 | 43 | 46 | 42 | 39 | 40 | 37 | 34 | 31 |
| 5 | 70 | 58 | 50 | 44 | 65 | 55 | 47 | 42 | 48 | 42 | 38 | 42 | 37 | 34 | 36 | 32 | 30 | 27 |
| 6 | 64 | 52 | 44 | 38 | 60 | 49 | 42 | 36 | 43 | 37 | 33 | 38 | 33 | 29 | 33 | 29 | 26 | 23 |
| 7 | 60 | 47 | 39 | 33 | 55 | 44 | 37 | 32 | 39 | 33 | 29 | 34 | 30 | 26 | 30 | 26 | 23 | 21 |
| 8 | 55 | 43 | 35 | 30 | 52 | 40 | 33 | 28 | 36 | 30 | 26 | 31 | 27 | 23 | 27 | 24 | 21 | 19 |
| 9 | 52 | 39 | 32 | 26 | 48 | 37 | 30 | 25 | 33 | 27 | 23 | 29 | 24 | 21 | 25 | 22 | 19 | 17 |
| 10 | 48 | 36 | 29 | 24 | 45 | 34 | 27 | 23 | 30 | 25 | 21 | 27 | 22 | 19 | 23 | 20 | 17 | 15 |

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 | 8561 | 8545 |
| 25° | 8574 | 8418 | 8392 |
| 30° | 8392 | 8265 | 8211 |
| 35° | 8154 | 8039 | 7991 |
| 40° | 7900 | 7777 | 7746 |
| 45° | 7592 | 7492 | 7459 |
| 50° | 7278 | 7216 | 7168 |
| 55° | 6938 | 6938 | 6828 |
| 60° | 6514 | 6640 | 6405 |
| 65° | 5961 | 6259 | 5813 |
| 70° | 5255 | 5760 | 5117 |
| 75° | 4488 | 5156 | 4367 |
| 80° | 3480 | 4339 | 3526 |
| 85° | 2251 | 3331 | 2971 |



TEST NUMBER: P564661

CATALOG NUMBER: SQ4-PW1-050U-075D-940-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 272.8 | 2.2 |
| 10°-20° | 770.1 | 6.1 |
| 20°-30° | 1142.3 | 9.1 |
| 30°-40° | 1336.6 | 10.7 |
| 40°-50° | 1330.6 | 10.6 |
| 50°-60° | 1149.0 | 9.2 |
| 60°-70° | 827.1 | 6.6 |
| 70°-80° | 433.7 | 3.5 |
| 80°-90° | 110.6 | 0.9 |
| 90°-100° | 379.8 | 3.0 |
| 100°-110° | 1031.8 | 8.2 |
| 110°-120° | 1060.8 | 8.5 |
| 120°-130° | 848.2 | 6.8 |
| 130°-140° | 666.4 | 5.3 |
| 140°-150° | 511.0 | 4.1 |
| 150°-160° | 367.5 | 2.9 |
| 160°-170° | 224.7 | 1.8 |
| 170°-180° | 75.7 | 0.6 |
| 0°-30° | 2185.1 | 17.4 |
| 0°-40° | 3521.8 | 28.1 |
| 0°-60° | 6001.4 | 47.9 |
| 0°-90° | 7372.9 | 58.8 |
| 90°-120° | 2472.4 | 19.7 |
| 90°-150° | 4498.0 | 35.9 |
| 90°-180° | 5166.0 | 41.2 |
| 0°-180° | 12538.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2897 | 2897 | 2897 | 2897 | 2897 | |
| 5° | 2904 | 2872 | 2881 | 2874 | 2869 | 275 |
| 15° | 2764 | 2729 | 2733 | 2728 | 2723 | 779 |
| 25° | 2527 | 2484 | 2481 | 2466 | 2473 | 1162 |
| 35° | 2172 | 2142 | 2141 | 2121 | 2128 | 1358 |
| 45° | 1746 | 1731 | 1723 | 1718 | 1715 | 1347 |
| 55° | 1294 | 1291 | 1294 | 1276 | 1274 | 1154 |
| 65° | 819 | 844 | 860 | 826 | 799 | 812 |
| 75° | 378 | 413 | 434 | 405 | 368 | 405 |
| 85° | 64 | 84 | 94 | 89 | 84 | 84 |
| 90° | 2 | 10 | 18 | 23 | 23 | 6 |
| 95° | 56 | 208 | 661 | 288 | 193 | 59 |
| 105° | 183 | 285 | 1135 | 1728 | 1626 | 195 |
| 115° | 326 | 395 | 908 | 1807 | 2058 | 321 |
| 125° | 448 | 510 | 822 | 1384 | 1633 | 399 |
| 135° | 539 | 599 | 799 | 1128 | 1272 | 417 |
| 145° | 623 | 668 | 789 | 958 | 1030 | 391 |
| 155° | 705 | 730 | 784 | 860 | 885 | 325 |
| 165° | 763 | 773 | 786 | 819 | 822 | 215 |
| 175° | 791 | 794 | 789 | 799 | 796 | 75 |
| 180° | 791 | 791 | 791 | 791 | 791 | |

TEST NUMBER: P564661

CATALOG NUMBER: SQ4-PW1-050U-075D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2896.6 | 2896.6 | 2896.6 | 2896.6 | 2896.6 |
| 2.5° | 2913.0 | 2889.0 | 2896.6 | 2890.2 | 2876.2 |
| 5° | 2904.3 | 2871.9 | 2881.3 | 2873.6 | 2868.6 |
| 7.5° | 2874.7 | 2844.8 | 2851.7 | 2843.5 | 2840.5 |
| 10° | 2848.2 | 2818.2 | 2825.2 | 2814.9 | 2809.9 |
| 12.5° | 2817.5 | 2785.6 | 2792.5 | 2782.2 | 2779.2 |
| 15° | 2763.9 | 2729.0 | 2733.3 | 2728.1 | 2723.1 |
| 17.5° | 2701.7 | 2666.2 | 2667.0 | 2658.8 | 2657.8 |
| 20° | 2656.7 | 2619.3 | 2615.9 | 2605.8 | 2610.8 |
| 22.5° | 2607.7 | 2568.3 | 2564.9 | 2550.7 | 2557.7 |
| 25° | 2526.6 | 2484.2 | 2480.7 | 2465.5 | 2473.0 |
| 27.5° | 2432.7 | 2390.7 | 2390.8 | 2369.6 | 2377.5 |
| 30° | 2363.3 | 2323.3 | 2327.5 | 2302.2 | 2312.2 |
| 32.5° | 2289.8 | 2253.8 | 2256.1 | 2230.8 | 2240.8 |
| 35° | 2171.8 | 2141.9 | 2141.2 | 2121.0 | 2128.5 |
| 37.5° | 2051.4 | 2024.9 | 2020.8 | 2009.1 | 2011.1 |
| 40° | 1967.7 | 1945.2 | 1937.1 | 1929.4 | 1929.4 |
| 42.5° | 1879.9 | 1859.4 | 1851.3 | 1845.6 | 1843.6 |
| 45° | 1745.6 | 1730.7 | 1722.7 | 1717.5 | 1715.0 |
| 47.5° | 1612.9 | 1599.0 | 1592.0 | 1588.4 | 1585.9 |
| 50° | 1521.1 | 1511.1 | 1508.3 | 1500.6 | 1498.1 |
| 52.5° | 1429.2 | 1423.2 | 1420.5 | 1410.7 | 1408.3 |
| 55° | 1293.9 | 1291.4 | 1293.9 | 1276.0 | 1273.5 |
| 57.5° | 1153.0 | 1157.0 | 1165.3 | 1141.2 | 1135.2 |
| 60° | 1059.1 | 1069.1 | 1079.5 | 1051.2 | 1041.3 |
| 62.5° | 963.2 | 979.1 | 993.8 | 961.3 | 947.3 |
| 65° | 819.2 | 844.2 | 860.1 | 826.3 | 798.8 |
| 67.5° | 680.4 | 711.3 | 730.4 | 694.0 | 663.0 |
| 70° | 584.4 | 619.4 | 640.6 | 604.1 | 569.1 |
| 72.5° | 500.7 | 539.7 | 556.9 | 522.4 | 487.5 |
| 75° | 377.7 | 412.6 | 433.9 | 404.9 | 367.5 |
| 77.5° | 268.0 | 300.9 | 318.5 | 293.3 | 262.4 |
| 80° | 196.5 | 231.4 | 245.0 | 224.0 | 199.1 |
| 82.5° | 139.3 | 168.3 | 177.6 | 165.0 | 148.0 |
| 85° | 63.8 | 83.8 | 94.4 | 89.2 | 84.2 |
| 87.5° | 16.8 | 32.3 | 42.4 | 43.4 | 45.4 |
| 90° | 2.5 | 10.0 | 17.8 | 22.9 | 22.9 |
| 92.5° | 22.9 | 104.0 | 180.6 | 77.6 | 65.6 |
| 95° | 56.0 | 207.7 | 661.4 | 287.9 | 193.3 |
| 97.5° | 92.6 | 229.4 | 1014.0 | 788.9 | 554.1 |
| 100° | 117.0 | 243.9 | 1121.9 | 1137.3 | 918.4 |
| 102.5° | 141.4 | 258.4 | 1150.4 | 1406.5 | 1213.5 |
| 105° | 183.2 | 285.2 | 1134.6 | 1727.6 | 1625.6 |
| 107.5° | 226.4 | 316.5 | 1069.0 | 1893.4 | 1921.8 |
| 110° | 256.9 | 339.0 | 1020.2 | 1926.1 | 2047.9 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 283.4 | 361.5 | 971.3 | 1899.0 | 2082.5 |
| 115° | 325.6 | 395.3 | 908.2 | 1806.9 | 2058.1 |
| 117.5° | 365.3 | 432.0 | 868.0 | 1676.3 | 1959.4 |
| 120° | 391.8 | 456.5 | 849.7 | 1588.8 | 1869.9 |
| 122.5° | 414.2 | 478.8 | 837.5 | 1501.0 | 1772.2 |
| 125° | 447.7 | 509.9 | 821.7 | 1384.5 | 1633.3 |
| 127.5° | 477.8 | 539.5 | 813.1 | 1296.2 | 1509.6 |
| 130° | 496.1 | 555.8 | 809.0 | 1240.8 | 1432.3 |
| 132.5° | 514.4 | 574.1 | 804.9 | 1193.4 | 1363.1 |
| 135° | 539.3 | 599.0 | 798.8 | 1127.7 | 1272.0 |
| 137.5° | 566.3 | 620.5 | 795.8 | 1069.7 | 1191.1 |
| 140° | 582.6 | 634.8 | 793.7 | 1032.8 | 1142.3 |
| 142.5° | 598.9 | 647.1 | 791.7 | 1003.9 | 1095.5 |
| 145° | 623.3 | 668.1 | 788.6 | 958.2 | 1030.3 |
| 147.5° | 650.8 | 689.1 | 786.1 | 922.2 | 978.9 |
| 150° | 669.1 | 701.4 | 786.1 | 901.6 | 946.4 |
| 152.5° | 683.3 | 711.7 | 784.1 | 883.1 | 919.9 |
| 155° | 704.7 | 729.6 | 783.6 | 860.4 | 885.3 |
| 157.5° | 725.6 | 745.0 | 783.6 | 845.0 | 864.0 |
| 160° | 737.8 | 755.2 | 783.6 | 834.8 | 849.7 |
| 162.5° | 750.0 | 763.4 | 785.6 | 826.5 | 837.5 |
| 165° | 763.2 | 773.2 | 786.1 | 819.2 | 821.7 |
| 167.5° | 776.9 | 781.9 | 788.6 | 810.6 | 812.6 |
| 170° | 781.0 | 786.0 | 788.6 | 806.5 | 806.5 |
| 172.5° | 785.1 | 788.1 | 788.6 | 802.4 | 802.4 |
| 175° | 791.2 | 793.7 | 788.6 | 798.8 | 796.3 |
| 177.5° | 793.2 | 793.2 | 787.1 | 795.2 | 791.2 |
| 180° | 791.2 | 791.2 | 791.2 | 791.2 | 791.2 |

(END OF REPORT)