

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: P563969

Luminaire Tested: **SQ4-PR1-050U-075D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563969
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-075D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13731.4 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

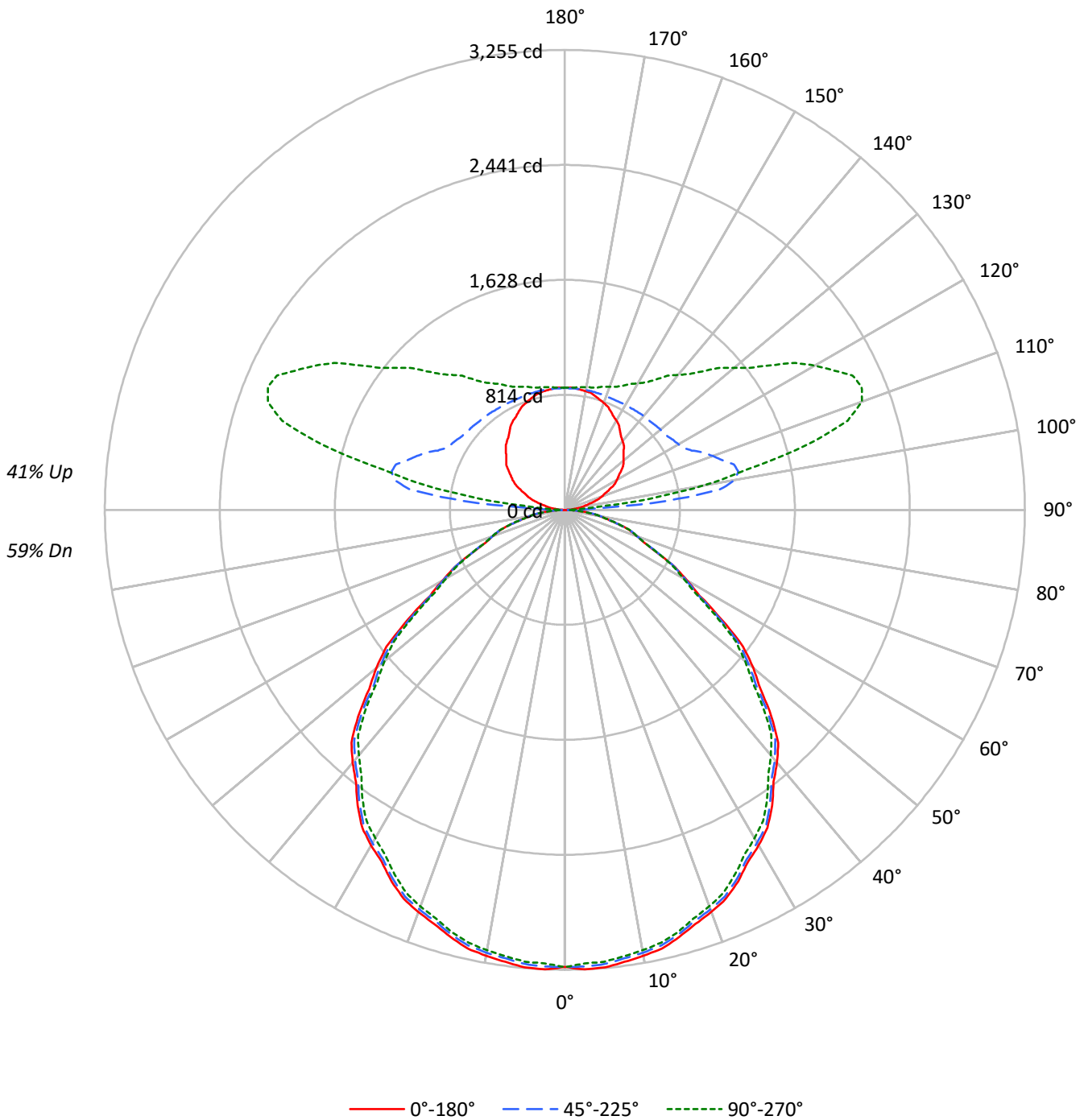
Input Watts (W): 105.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P563969

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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 | 89 | 93 | 90 | 86 | 83 | 78 | 76 | 73 | 67 | 65 | 64 | 57 | 56 | 55 | 50 |
| 2 | 91 | 84 | 78 | 73 | 85 | 79 | 73 | 69 | 69 | 65 | 61 | 59 | 56 | 54 | 51 | 49 | 47 | 43 |
| 3 | 84 | 74 | 67 | 61 | 78 | 70 | 63 | 58 | 61 | 56 | 52 | 53 | 49 | 46 | 45 | 43 | 40 | 37 |
| 4 | 77 | 66 | 58 | 52 | 71 | 62 | 55 | 49 | 54 | 49 | 44 | 47 | 43 | 40 | 41 | 38 | 35 | 32 |
| 5 | 71 | 59 | 51 | 45 | 66 | 55 | 48 | 43 | 49 | 43 | 39 | 43 | 38 | 35 | 37 | 33 | 31 | 28 |
| 6 | 65 | 53 | 45 | 39 | 61 | 50 | 43 | 37 | 44 | 38 | 34 | 39 | 34 | 30 | 33 | 30 | 27 | 24 |
| 7 | 60 | 48 | 40 | 34 | 56 | 45 | 38 | 33 | 40 | 34 | 30 | 35 | 30 | 27 | 31 | 27 | 24 | 22 |
| 8 | 56 | 44 | 36 | 30 | 52 | 41 | 34 | 29 | 37 | 31 | 27 | 32 | 28 | 24 | 28 | 24 | 22 | 19 |
| 9 | 52 | 40 | 32 | 27 | 49 | 38 | 31 | 26 | 34 | 28 | 24 | 30 | 25 | 22 | 26 | 22 | 20 | 17 |
| 10 | 49 | 37 | 29 | 25 | 46 | 35 | 28 | 24 | 31 | 25 | 22 | 27 | 23 | 20 | 24 | 20 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|------|------|
| 0° | 9950 | 9950 | 9950 |
| 5° | 10039 | 9962 | 9910 |
| 10° | 10007 | 9938 | 9885 |
| 15° | 9963 | 9901 | 9848 |
| 20° | 9913 | 9849 | 9776 |
| 25° | 9843 | 9777 | 9664 |
| 30° | 9737 | 9668 | 9529 |
| 35° | 9594 | 9510 | 9374 |
| 40° | 9375 | 9274 | 9106 |
| 45° | 8993 | 8835 | 8653 |
| 50° | 8319 | 8119 | 7959 |
| 55° | 7261 | 7097 | 6947 |
| 60° | 6119 | 6067 | 5947 |
| 65° | 5293 | 5313 | 5272 |
| 70° | 4861 | 4886 | 4886 |
| 75° | 4669 | 4669 | 4702 |
| 80° | 4392 | 4442 | 4392 |
| 85° | 3539 | 3934 | 3934 |



TEST NUMBER: P563969

CATALOG NUMBER: SQ4-PR1-050U-075D-830-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 305.9 | 2.2 |
| 10°-20° | 875.3 | 6.4 |
| 20°-30° | 1320.2 | 9.6 |
| 30°-40° | 1573.1 | 11.5 |
| 40°-50° | 1550.9 | 11.3 |
| 50°-60° | 1185.3 | 8.6 |
| 60°-70° | 733.5 | 5.3 |
| 70°-80° | 416.6 | 3.0 |
| 80°-90° | 130.1 | 0.9 |
| 90°-100° | 414.7 | 3.0 |
| 100°-110° | 1126.6 | 8.2 |
| 110°-120° | 1158.3 | 8.4 |
| 120°-130° | 926.1 | 6.7 |
| 130°-140° | 727.6 | 5.3 |
| 140°-150° | 557.9 | 4.1 |
| 150°-160° | 401.2 | 2.9 |
| 160°-170° | 245.4 | 1.8 |
| 170°-180° | 82.7 | 0.6 |
| 0°-30° | 2501.5 | 18.2 |
| 0°-40° | 4074.6 | 29.7 |
| 0°-60° | 6810.8 | 49.6 |
| 0°-90° | 8090.9 | 58.9 |
| 90°-120° | 2699.5 | 19.7 |
| 90°-150° | 4911.2 | 35.8 |
| 90°-180° | 5640.0 | 41.1 |
| 0°-180° | 13731.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3235 | 3235 | 3235 | 3235 | 3235 | |
| 5° | 3252 | 3216 | 3227 | 3216 | 3210 | 309 |
| 15° | 3129 | 3097 | 3110 | 3098 | 3093 | 883 |
| 25° | 2901 | 2865 | 2881 | 2851 | 2848 | 1335 |
| 35° | 2555 | 2525 | 2533 | 2500 | 2497 | 1595 |
| 45° | 2068 | 2040 | 2031 | 1995 | 1990 | 1584 |
| 55° | 1354 | 1332 | 1324 | 1301 | 1296 | 1213 |
| 65° | 727 | 722 | 730 | 724 | 724 | 737 |
| 75° | 393 | 393 | 393 | 396 | 396 | 415 |
| 85° | 100 | 106 | 112 | 112 | 112 | 117 |
| 90° | 3 | 11 | 19 | 25 | 25 | 8 |
| 95° | 61 | 227 | 722 | 314 | 211 | 65 |
| 105° | 200 | 311 | 1239 | 1886 | 1775 | 212 |
| 115° | 356 | 432 | 992 | 1973 | 2247 | 351 |
| 125° | 489 | 557 | 897 | 1512 | 1783 | 436 |
| 135° | 589 | 654 | 872 | 1231 | 1389 | 455 |
| 145° | 680 | 729 | 861 | 1046 | 1125 | 427 |
| 155° | 769 | 797 | 856 | 940 | 967 | 355 |
| 165° | 833 | 844 | 858 | 894 | 897 | 235 |
| 175° | 864 | 867 | 861 | 872 | 869 | 82 |
| 180° | 864 | 864 | 864 | 864 | 864 | |



TEST NUMBER: P563969

CATALOG NUMBER: SQ4-PR1-050U-075D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3235.2 | 3235.2 | 3235.2 | 3235.2 | 3235.2 |
| 2.5° | 3255.2 | 3226.9 | 3235.2 | 3228.1 | 3212.9 |
| 5° | 3251.9 | 3216.5 | 3226.8 | 3215.5 | 3210.1 |
| 7.5° | 3226.8 | 3191.9 | 3202.3 | 3191.1 | 3187.8 |
| 10° | 3204.5 | 3171.8 | 3182.2 | 3171.0 | 3165.5 |
| 12.5° | 3180.0 | 3145.1 | 3157.7 | 3144.2 | 3138.8 |
| 15° | 3129.3 | 3096.6 | 3109.8 | 3098.5 | 3093.1 |
| 17.5° | 3073.6 | 3038.7 | 3051.8 | 3038.8 | 3031.8 |
| 20° | 3029.0 | 2996.3 | 3009.5 | 2989.9 | 2987.2 |
| 22.5° | 2979.9 | 2947.2 | 2960.4 | 2934.2 | 2933.7 |
| 25° | 2900.8 | 2865.4 | 2881.3 | 2850.6 | 2847.8 |
| 27.5° | 2806.6 | 2773.9 | 2787.1 | 2755.8 | 2752.5 |
| 30° | 2742.0 | 2709.3 | 2722.4 | 2688.9 | 2683.4 |
| 32.5° | 2668.4 | 2637.9 | 2648.9 | 2615.4 | 2612.1 |
| 35° | 2555.3 | 2525.3 | 2533.0 | 2499.5 | 2496.7 |
| 37.5° | 2426.5 | 2399.3 | 2403.7 | 2366.8 | 2364.1 |
| 40° | 2335.1 | 2307.9 | 2310.0 | 2271.0 | 2268.2 |
| 42.5° | 2234.8 | 2207.6 | 2205.3 | 2166.2 | 2163.5 |
| 45° | 2067.6 | 2040.4 | 2031.4 | 1995.0 | 1989.6 |
| 47.5° | 1877.0 | 1849.8 | 1833.0 | 1803.4 | 1799.5 |
| 50° | 1738.8 | 1711.6 | 1697.0 | 1671.7 | 1663.6 |
| 52.5° | 1589.4 | 1562.2 | 1549.9 | 1526.8 | 1518.7 |
| 55° | 1354.3 | 1332.5 | 1323.6 | 1301.2 | 1295.7 |
| 57.5° | 1130.8 | 1116.1 | 1113.5 | 1091.7 | 1089.5 |
| 60° | 994.8 | 986.6 | 986.4 | 966.9 | 966.9 |
| 62.5° | 878.9 | 872.9 | 877.2 | 864.3 | 862.2 |
| 65° | 727.3 | 721.8 | 730.1 | 724.5 | 724.5 |
| 67.5° | 607.5 | 607.5 | 612.5 | 610.3 | 610.3 |
| 70° | 540.6 | 540.6 | 543.4 | 543.4 | 543.4 |
| 72.5° | 480.4 | 478.2 | 485.4 | 485.4 | 483.2 |
| 75° | 392.9 | 392.9 | 392.9 | 395.7 | 395.7 |
| 77.5° | 306.0 | 306.5 | 308.7 | 308.1 | 306.0 |
| 80° | 248.0 | 250.7 | 250.8 | 248.0 | 248.0 |
| 82.5° | 190.0 | 192.8 | 192.8 | 192.2 | 190.0 |
| 85° | 100.3 | 105.8 | 111.5 | 111.5 | 111.5 |
| 87.5° | 29.5 | 39.9 | 48.5 | 49.5 | 47.4 |
| 90° | 2.8 | 10.9 | 19.4 | 25.0 | 25.0 |
| 92.5° | 25.0 | 113.5 | 197.2 | 84.7 | 71.7 |
| 95° | 61.1 | 226.8 | 722.2 | 314.3 | 211.1 |
| 97.5° | 101.1 | 250.5 | 1107.2 | 861.4 | 605.0 |
| 100° | 127.8 | 266.3 | 1225.0 | 1241.8 | 1002.8 |
| 102.5° | 154.4 | 282.1 | 1256.1 | 1535.7 | 1325.0 |
| 105° | 200.0 | 311.4 | 1238.9 | 1886.3 | 1775.0 |
| 107.5° | 247.2 | 345.5 | 1167.2 | 2067.3 | 2098.3 |
| 110° | 280.6 | 370.2 | 1113.9 | 2103.0 | 2236.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 309.4 | 394.7 | 1060.5 | 2073.4 | 2273.8 |
| 115° | 355.5 | 431.6 | 991.6 | 1972.9 | 2247.2 |
| 117.5° | 398.9 | 471.7 | 947.8 | 1830.3 | 2139.4 |
| 120° | 427.8 | 498.4 | 927.8 | 1734.7 | 2041.6 |
| 122.5° | 452.2 | 522.8 | 914.4 | 1638.9 | 1935.0 |
| 125° | 488.9 | 556.8 | 897.2 | 1511.7 | 1783.3 |
| 127.5° | 521.7 | 589.0 | 887.8 | 1415.3 | 1648.3 |
| 130° | 541.7 | 606.8 | 883.3 | 1354.7 | 1563.9 |
| 132.5° | 561.7 | 626.8 | 878.9 | 1303.1 | 1488.3 |
| 135° | 588.9 | 654.1 | 872.2 | 1231.3 | 1388.9 |
| 137.5° | 618.3 | 677.5 | 868.9 | 1168.0 | 1300.5 |
| 140° | 636.1 | 693.1 | 866.6 | 1127.7 | 1247.2 |
| 142.5° | 653.9 | 706.6 | 864.4 | 1096.1 | 1196.1 |
| 145° | 680.5 | 729.4 | 861.1 | 1046.2 | 1125.0 |
| 147.5° | 710.5 | 752.4 | 858.3 | 1006.9 | 1068.9 |
| 150° | 730.5 | 765.8 | 858.3 | 984.4 | 1033.3 |
| 152.5° | 746.1 | 777.1 | 856.1 | 964.2 | 1004.4 |
| 155° | 769.4 | 796.6 | 855.5 | 939.5 | 966.6 |
| 157.5° | 792.2 | 813.4 | 855.5 | 922.7 | 943.3 |
| 160° | 805.5 | 824.6 | 855.5 | 911.5 | 927.8 |
| 162.5° | 818.9 | 833.5 | 857.8 | 902.5 | 914.4 |
| 165° | 833.3 | 844.2 | 858.3 | 894.5 | 897.2 |
| 167.5° | 848.3 | 853.7 | 861.1 | 885.0 | 887.2 |
| 170° | 852.8 | 858.2 | 861.1 | 880.5 | 880.5 |
| 172.5° | 857.2 | 860.5 | 861.1 | 876.1 | 876.1 |
| 175° | 863.9 | 866.6 | 861.1 | 872.1 | 869.4 |
| 177.5° | 866.1 | 866.1 | 859.4 | 868.2 | 863.9 |
| 180° | 863.9 | 863.9 | 863.9 | 863.9 | 863.9 |

(END OF REPORT)