

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: P562661

Luminaire Tested: **SQ4-PC3-050U-100D-930-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562661
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PC3-050U-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

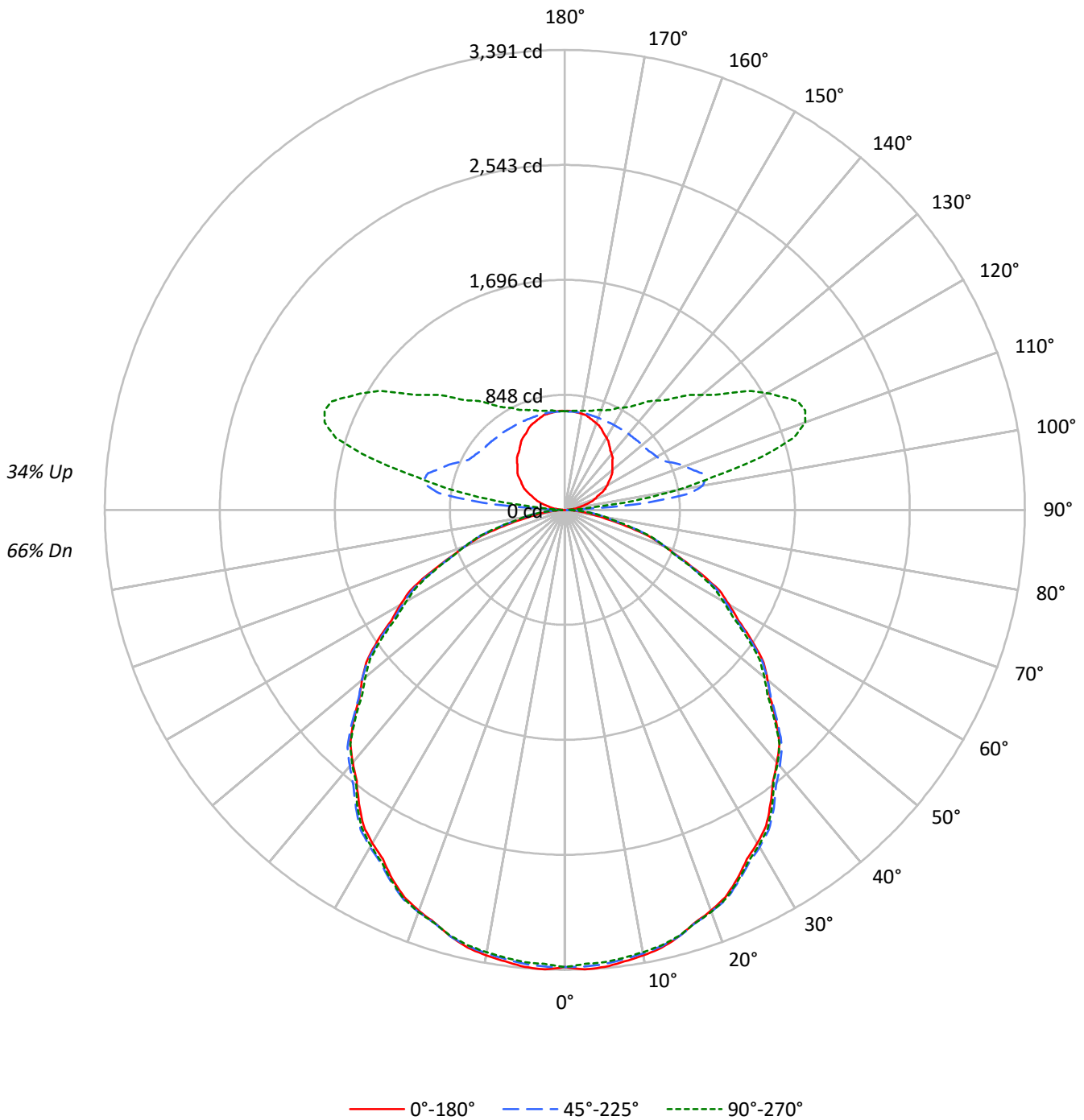
Lumens per Lamp: N/A
Luminaire Lumens: 13958.5 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 134.4
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



TEST NUMBER: P562661
CATALOG NUMBER: SQ4-PC3-050U-100D-930-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P562661

CATALOG NUMBER: SQ4-PC3-050U-100D-930-1D-UNV-STD-W-12

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 | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 81 | 81 | 81 | 71 | 71 | 71 | 66 |
| 1 | 101 | 97 | 93 | 90 | 95 | 91 | 88 | 85 | 81 | 78 | 76 | 72 | 70 | 68 | 63 | 61 | 60 | 56 |
| 2 | 92 | 85 | 78 | 73 | 87 | 80 | 74 | 70 | 71 | 67 | 63 | 63 | 60 | 57 | 55 | 53 | 51 | 47 |
| 3 | 84 | 75 | 67 | 61 | 79 | 70 | 64 | 58 | 63 | 57 | 53 | 56 | 51 | 48 | 49 | 46 | 43 | 39 |
| 4 | 77 | 66 | 58 | 52 | 72 | 62 | 55 | 49 | 56 | 50 | 45 | 49 | 45 | 41 | 44 | 40 | 37 | 34 |
| 5 | 71 | 59 | 50 | 44 | 66 | 56 | 48 | 42 | 50 | 44 | 39 | 44 | 39 | 36 | 39 | 35 | 32 | 29 |
| 6 | 65 | 53 | 44 | 38 | 61 | 50 | 43 | 37 | 45 | 39 | 34 | 40 | 35 | 31 | 36 | 32 | 28 | 26 |
| 7 | 60 | 48 | 40 | 34 | 57 | 45 | 38 | 33 | 41 | 35 | 30 | 37 | 31 | 28 | 32 | 28 | 25 | 23 |
| 8 | 56 | 43 | 35 | 30 | 53 | 41 | 34 | 29 | 37 | 31 | 27 | 33 | 28 | 25 | 30 | 26 | 22 | 20 |
| 9 | 52 | 40 | 32 | 27 | 49 | 38 | 31 | 26 | 34 | 28 | 24 | 31 | 26 | 22 | 28 | 23 | 20 | 18 |
| 10 | 49 | 36 | 29 | 24 | 46 | 35 | 28 | 23 | 32 | 26 | 22 | 28 | 23 | 20 | 26 | 21 | 18 | 17 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10367 | 10367 | 10367 |
| 5° | 10446 | 10378 | 10340 |
| 10° | 10420 | 10372 | 10342 |
| 15° | 10365 | 10365 | 10356 |
| 20° | 10297 | 10328 | 10328 |
| 25° | 10200 | 10274 | 10242 |
| 30° | 10076 | 10198 | 10153 |
| 35° | 9926 | 10078 | 10008 |
| 40° | 9762 | 9900 | 9799 |
| 45° | 9584 | 9652 | 9503 |
| 50° | 9334 | 9334 | 9185 |
| 55° | 9038 | 8920 | 8786 |
| 60° | 8601 | 8428 | 8294 |
| 65° | 7950 | 7791 | 7723 |
| 70° | 6961 | 7017 | 6988 |
| 75° | 5600 | 6194 | 6231 |
| 80° | 3980 | 5251 | 5308 |
| 85° | 2424 | 4407 | 4407 |



TEST NUMBER: P562661

CATALOG NUMBER: SQ4-PC3-050U-100D-930-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 319.0 | 2.3 |
| 10°-20° | 915.6 | 6.6 |
| 20°-30° | 1386.5 | 9.9 |
| 30°-40° | 1662.2 | 11.9 |
| 40°-50° | 1694.9 | 12.1 |
| 50°-60° | 1479.5 | 10.6 |
| 60°-70° | 1059.2 | 7.6 |
| 70°-80° | 545.6 | 3.9 |
| 80°-90° | 140.8 | 1.0 |
| 90°-100° | 349.6 | 2.5 |
| 100°-110° | 949.7 | 6.8 |
| 110°-120° | 976.5 | 7.0 |
| 120°-130° | 780.7 | 5.6 |
| 130°-140° | 613.5 | 4.4 |
| 140°-150° | 470.4 | 3.4 |
| 150°-160° | 338.3 | 2.4 |
| 160°-170° | 206.9 | 1.5 |
| 170°-180° | 69.7 | 0.5 |
| 0°-30° | 2621.1 | 18.8 |
| 0°-40° | 4283.3 | 30.7 |
| 0°-60° | 7457.7 | 53.4 |
| 0°-90° | 9203.2 | 65.9 |
| 90°-120° | 2275.9 | 16.3 |
| 90°-150° | 4140.4 | 29.7 |
| 90°-180° | 4755.0 | 34.1 |
| 0°-180° | 13958.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3371 | 3371 | 3371 | 3371 | 3371 | |
| 5° | 3384 | 3350 | 3362 | 3352 | 3349 | 321 |
| 15° | 3256 | 3228 | 3256 | 3256 | 3252 | 918 |
| 25° | 3006 | 2985 | 3028 | 3018 | 3018 | 1383 |
| 35° | 2644 | 2638 | 2684 | 2666 | 2666 | 1653 |
| 45° | 2204 | 2198 | 2219 | 2191 | 2185 | 1696 |
| 55° | 1686 | 1664 | 1664 | 1639 | 1639 | 1503 |
| 65° | 1092 | 1068 | 1071 | 1061 | 1061 | 1080 |
| 75° | 471 | 493 | 521 | 524 | 524 | 509 |
| 85° | 69 | 105 | 125 | 128 | 125 | 93 |
| 90° | 2 | 9 | 16 | 21 | 21 | 6 |
| 95° | 52 | 191 | 609 | 265 | 178 | 55 |
| 105° | 169 | 262 | 1044 | 1590 | 1496 | 179 |
| 115° | 300 | 364 | 836 | 1663 | 1894 | 296 |
| 125° | 412 | 469 | 756 | 1274 | 1503 | 367 |
| 135° | 496 | 551 | 735 | 1038 | 1171 | 384 |
| 145° | 574 | 615 | 726 | 882 | 948 | 360 |
| 155° | 649 | 672 | 721 | 792 | 815 | 299 |
| 165° | 702 | 712 | 724 | 754 | 756 | 198 |
| 175° | 728 | 731 | 726 | 735 | 733 | 69 |
| 180° | 728 | 728 | 728 | 728 | 728 | |

TEST NUMBER: P562661

CATALOG NUMBER: SQ4-PC3-050U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3371.1 | 3371.1 | 3371.1 | 3371.1 | 3371.1 |
| 2.5° | 3391.1 | 3361.8 | 3371.1 | 3363.4 | 3351.1 |
| 5° | 3383.6 | 3350.0 | 3361.8 | 3352.3 | 3349.3 |
| 7.5° | 3359.3 | 3325.7 | 3341.2 | 3334.8 | 3331.8 |
| 10° | 3336.8 | 3303.2 | 3321.2 | 3314.9 | 3311.8 |
| 12.5° | 3306.8 | 3275.7 | 3296.2 | 3290.0 | 3289.3 |
| 15° | 3255.6 | 3228.2 | 3255.6 | 3255.6 | 3252.5 |
| 17.5° | 3191.3 | 3166.3 | 3195.7 | 3197.5 | 3195.7 |
| 20° | 3146.4 | 3118.9 | 3155.7 | 3152.7 | 3155.7 |
| 22.5° | 3091.4 | 3068.9 | 3108.3 | 3100.3 | 3103.3 |
| 25° | 3005.9 | 2984.6 | 3027.8 | 3018.4 | 3018.4 |
| 27.5° | 2904.8 | 2889.5 | 2936.6 | 2926.6 | 2926.6 |
| 30° | 2837.4 | 2822.1 | 2871.7 | 2859.2 | 2859.2 |
| 32.5° | 2762.4 | 2752.1 | 2799.3 | 2784.3 | 2784.3 |
| 35° | 2643.8 | 2637.7 | 2684.4 | 2665.7 | 2665.7 |
| 37.5° | 2521.5 | 2516.0 | 2558.3 | 2535.7 | 2528.3 |
| 40° | 2431.6 | 2428.5 | 2465.9 | 2440.9 | 2440.9 |
| 42.5° | 2341.7 | 2338.6 | 2371.0 | 2341.1 | 2341.1 |
| 45° | 2203.7 | 2197.6 | 2219.3 | 2191.1 | 2185.0 |
| 47.5° | 2053.3 | 2047.2 | 2060.8 | 2030.1 | 2027.0 |
| 50° | 1950.9 | 1944.8 | 1950.9 | 1922.7 | 1919.7 |
| 52.5° | 1846.0 | 1835.0 | 1836.0 | 1807.9 | 1807.3 |
| 55° | 1685.6 | 1664.2 | 1663.7 | 1638.7 | 1638.7 |
| 57.5° | 1515.8 | 1487.7 | 1490.2 | 1468.9 | 1465.8 |
| 60° | 1398.4 | 1367.9 | 1370.3 | 1351.5 | 1348.4 |
| 62.5° | 1283.5 | 1248.1 | 1255.4 | 1234.2 | 1233.6 |
| 65° | 1092.5 | 1068.1 | 1070.6 | 1061.3 | 1061.3 |
| 67.5° | 909.0 | 886.4 | 902.7 | 895.2 | 894.6 |
| 70° | 774.1 | 758.8 | 780.4 | 780.3 | 777.2 |
| 72.5° | 649.3 | 648.6 | 675.5 | 675.5 | 677.3 |
| 75° | 471.3 | 492.7 | 521.3 | 524.4 | 524.4 |
| 77.5° | 314.6 | 352.5 | 383.9 | 385.2 | 384.6 |
| 80° | 224.7 | 267.5 | 296.5 | 302.7 | 299.7 |
| 82.5° | 152.3 | 197.5 | 221.6 | 227.8 | 224.7 |
| 85° | 68.7 | 105.3 | 124.9 | 127.9 | 124.9 |
| 87.5° | 20.4 | 43.8 | 53.2 | 54.0 | 49.2 |
| 90° | 2.3 | 9.2 | 16.4 | 21.1 | 21.1 |
| 92.5° | 21.1 | 95.7 | 166.3 | 71.4 | 60.4 |
| 95° | 51.5 | 191.2 | 608.9 | 265.0 | 178.0 |
| 97.5° | 85.2 | 211.2 | 933.4 | 726.2 | 510.0 |
| 100° | 107.7 | 224.5 | 1032.7 | 1046.9 | 845.4 |
| 102.5° | 130.2 | 237.8 | 1059.0 | 1294.7 | 1117.0 |
| 105° | 168.6 | 262.5 | 1044.4 | 1590.3 | 1496.4 |
| 107.5° | 208.4 | 291.3 | 984.0 | 1742.9 | 1769.0 |
| 110° | 236.5 | 312.1 | 939.1 | 1772.9 | 1885.1 |



TEST NUMBER: P562661

CATALOG NUMBER: SQ4-PC3-050U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 260.9 | 332.8 | 894.1 | 1748.0 | 1917.0 |
| 115° | 299.7 | 363.9 | 836.0 | 1663.2 | 1894.5 |
| 117.5° | 336.3 | 397.6 | 799.0 | 1543.1 | 1803.6 |
| 120° | 360.6 | 420.2 | 782.2 | 1462.5 | 1721.2 |
| 122.5° | 381.2 | 440.8 | 770.9 | 1381.7 | 1631.3 |
| 125° | 412.2 | 469.4 | 756.4 | 1274.4 | 1503.4 |
| 127.5° | 439.8 | 496.6 | 748.4 | 1193.2 | 1389.6 |
| 130° | 456.6 | 511.6 | 744.7 | 1142.1 | 1318.4 |
| 132.5° | 473.5 | 528.5 | 740.9 | 1098.6 | 1254.7 |
| 135° | 496.5 | 551.4 | 735.3 | 1038.1 | 1170.9 |
| 137.5° | 521.3 | 571.2 | 732.5 | 984.7 | 1096.4 |
| 140° | 536.3 | 584.4 | 730.6 | 950.7 | 1051.5 |
| 142.5° | 551.3 | 595.7 | 728.8 | 924.1 | 1008.4 |
| 145° | 573.7 | 615.0 | 726.0 | 882.0 | 948.4 |
| 147.5° | 599.0 | 634.3 | 723.6 | 848.9 | 901.1 |
| 150° | 615.9 | 645.7 | 723.6 | 829.9 | 871.1 |
| 152.5° | 629.0 | 655.1 | 721.7 | 812.9 | 846.8 |
| 155° | 648.7 | 671.6 | 721.3 | 792.0 | 814.9 |
| 157.5° | 667.9 | 685.7 | 721.3 | 777.9 | 795.3 |
| 160° | 679.1 | 695.1 | 721.3 | 768.4 | 782.2 |
| 162.5° | 690.4 | 702.7 | 723.1 | 760.8 | 770.9 |
| 165° | 702.5 | 711.7 | 723.6 | 754.1 | 756.4 |
| 167.5° | 715.2 | 719.8 | 726.0 | 746.1 | 748.0 |
| 170° | 718.9 | 723.5 | 726.0 | 742.3 | 742.3 |
| 172.5° | 722.7 | 725.4 | 726.0 | 738.6 | 738.6 |
| 175° | 728.3 | 730.6 | 726.0 | 735.3 | 733.0 |
| 177.5° | 730.2 | 730.2 | 724.5 | 732.0 | 728.3 |
| 180° | 728.3 | 728.3 | 728.3 | 728.3 | 728.3 |

(END OF REPORT)