

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: P563754

Luminaire Tested: **SQ4-PP3-150U-050D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563754
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-150U-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

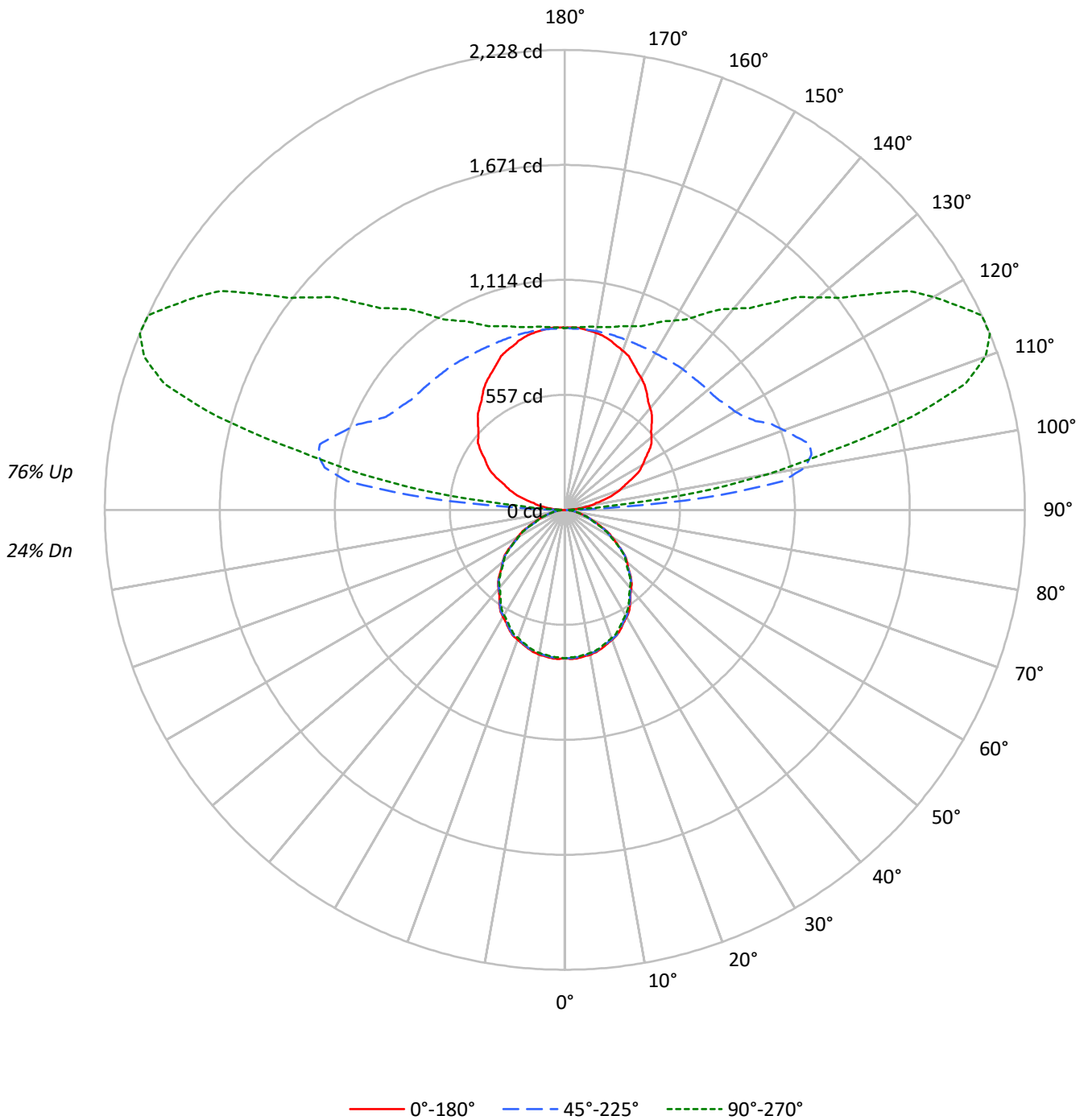
Lumens per Lamp: N/A
Luminaire Lumens: 7527.8 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 69 | 69 | 69 | 50 | 50 | 50 | 33 | 33 | 33 | 24 | | | | 24 |
| 1 | 92 | 88 | 84 | 81 | 82 | 78 | 75 | 73 | 61 | 59 | 57 | 44 | 43 | 42 | 29 | 28 | 28 | 21 | | | | 21 |
| 2 | 84 | 77 | 71 | 66 | 74 | 69 | 64 | 60 | 53 | 50 | 47 | 39 | 37 | 35 | 26 | 24 | 23 | 18 | | | | 18 |
| 3 | 77 | 68 | 61 | 55 | 68 | 60 | 55 | 50 | 47 | 43 | 40 | 34 | 32 | 30 | 23 | 21 | 20 | 15 | | | | 15 |
| 4 | 70 | 60 | 52 | 46 | 62 | 53 | 47 | 42 | 42 | 37 | 34 | 31 | 28 | 25 | 20 | 19 | 17 | 13 | | | | 13 |
| 5 | 64 | 53 | 45 | 40 | 57 | 48 | 41 | 36 | 37 | 32 | 29 | 27 | 24 | 22 | 18 | 16 | 15 | 11 | | | | 11 |
| 6 | 59 | 47 | 40 | 34 | 52 | 43 | 36 | 31 | 33 | 29 | 25 | 25 | 21 | 19 | 17 | 15 | 13 | 10 | | | | 10 |
| 7 | 54 | 43 | 35 | 30 | 48 | 38 | 32 | 27 | 30 | 25 | 22 | 22 | 19 | 17 | 15 | 13 | 12 | 9 | | | | 9 |
| 8 | 50 | 39 | 31 | 26 | 45 | 35 | 28 | 24 | 27 | 23 | 19 | 20 | 17 | 15 | 14 | 12 | 10 | 8 | | | | 8 |
| 9 | 47 | 35 | 28 | 23 | 42 | 32 | 25 | 21 | 25 | 20 | 17 | 19 | 15 | 13 | 13 | 11 | 9 | 7 | | | | 7 |
| 10 | 43 | 32 | 25 | 20 | 39 | 29 | 23 | 19 | 23 | 18 | 15 | 17 | 14 | 12 | 12 | 10 | 8 | 6 | | | | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6633 | 6633 | 6633 |
| 5° | 6681 | 6640 | 6617 |
| 10° | 6670 | 6623 | 6594 |
| 15° | 6626 | 6590 | 6553 |
| 20° | 6582 | 6545 | 6496 |
| 25° | 6504 | 6459 | 6395 |
| 30° | 6384 | 6349 | 6270 |
| 35° | 6216 | 6173 | 6096 |
| 40° | 6017 | 5980 | 5911 |
| 45° | 5853 | 5811 | 5754 |
| 50° | 5644 | 5606 | 5553 |
| 55° | 5352 | 5281 | 5239 |
| 60° | 4871 | 4731 | 4709 |
| 65° | 4292 | 4113 | 4100 |
| 70° | 3706 | 3553 | 3553 |
| 75° | 3190 | 3144 | 3098 |
| 80° | 2811 | 2848 | 2779 |
| 85° | 2202 | 2403 | 2403 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 68.0 | 0.9 |
| 10°-20° | 194.1 | 2.6 |
| 20°-30° | 290.7 | 3.9 |
| 30°-40° | 341.0 | 4.5 |
| 40°-50° | 342.1 | 4.5 |
| 50°-60° | 291.8 | 3.9 |
| 60°-70° | 190.3 | 2.5 |
| 70°-80° | 95.5 | 1.3 |
| 80°-90° | 28.3 | 0.4 |
| 90°-100° | 409.8 | 5.4 |
| 100°-110° | 1108.2 | 14.7 |
| 110°-120° | 1165.1 | 15.5 |
| 120°-130° | 946.4 | 12.6 |
| 130°-140° | 742.3 | 9.9 |
| 140°-150° | 569.7 | 7.6 |
| 150°-160° | 409.7 | 5.4 |
| 160°-170° | 250.3 | 3.3 |
| 170°-180° | 84.4 | 1.1 |
| 0°-30° | 552.8 | 7.3 |
| 0°-40° | 893.8 | 11.9 |
| 0°-60° | 1527.7 | 20.3 |
| 0°-90° | 1841.8 | 24.5 |
| 90°-120° | 2683.1 | 35.6 |
| 90°-150° | 4941.5 | 65.6 |
| 90°-180° | 5686.0 | 75.5 |
| 0°-180° | 7527.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|------|-------|------|------|
| 0° | 719 | 719 | 719 | 719 | 719 | |
| 5° | 721 | 715 | 717 | 714 | 714 | 69 |
| 15° | 694 | 687 | 690 | 687 | 686 | 196 |
| 25° | 639 | 632 | 634 | 629 | 628 | 294 |
| 35° | 552 | 546 | 548 | 542 | 541 | 345 |
| 45° | 449 | 446 | 445 | 441 | 441 | 345 |
| 55° | 333 | 331 | 328 | 326 | 326 | 296 |
| 65° | 197 | 193 | 188 | 187 | 188 | 196 |
| 75° | 90 | 90 | 88 | 88 | 87 | 97 |
| 85° | 21 | 23 | 23 | 23 | 23 | 24 |
| 90° | 2 | 6 | 12 | 13 | 12 | 5 |
| 95° | 64 | 223 | 682 | 353 | 210 | 67 |
| 105° | 206 | 318 | 1229 | 1813 | 1739 | 217 |
| 115° | 363 | 443 | 1020 | 1974 | 2228 | 358 |
| 125° | 496 | 569 | 919 | 1551 | 1822 | 443 |
| 135° | 595 | 666 | 894 | 1252 | 1417 | 460 |
| 145° | 692 | 744 | 882 | 1072 | 1153 | 433 |
| 155° | 781 | 812 | 874 | 961 | 993 | 360 |
| 165° | 851 | 859 | 878 | 912 | 917 | 240 |
| 175° | 883 | 882 | 879 | 890 | 888 | 84 |
| 180° | 882 | 882 | 882 | 882 | 882 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 0° | 718.9 | 718.9 | 718.9 | 718.9 | 718.9 |
| 2.5° | 723.4 | 717.5 | 718.9 | 717.8 | 714.9 |
| 5° | 721.4 | 714.6 | 717.0 | 714.5 | 714.5 |
| 7.5° | 716.5 | 709.1 | 711.5 | 708.9 | 708.8 |
| 10° | 712.0 | 704.6 | 706.9 | 704.4 | 703.8 |
| 12.5° | 705.4 | 698.0 | 700.9 | 697.8 | 697.7 |
| 15° | 693.7 | 686.9 | 689.9 | 687.4 | 686.1 |
| 17.5° | 680.5 | 673.1 | 676.7 | 673.1 | 672.6 |
| 20° | 670.4 | 663.0 | 666.6 | 661.6 | 661.6 |
| 22.5° | 658.3 | 650.9 | 655.0 | 648.5 | 648.5 |
| 25° | 638.9 | 631.5 | 634.5 | 628.8 | 628.2 |
| 27.5° | 615.8 | 608.5 | 611.7 | 605.2 | 605.1 |
| 30° | 599.2 | 592.4 | 596.0 | 589.1 | 588.5 |
| 32.5° | 581.0 | 574.8 | 577.4 | 570.4 | 569.8 |
| 35° | 551.9 | 546.4 | 548.1 | 541.8 | 541.2 |
| 37.5° | 521.3 | 515.6 | 517.7 | 512.2 | 512.0 |
| 40° | 499.6 | 495.9 | 496.5 | 492.0 | 490.8 |
| 42.5° | 479.5 | 475.3 | 475.8 | 471.4 | 471.2 |
| 45° | 448.6 | 445.5 | 445.4 | 441.0 | 441.0 |
| 47.5° | 415.8 | 413.5 | 412.8 | 409.2 | 409.0 |
| 50° | 393.2 | 391.3 | 390.6 | 387.5 | 386.9 |
| 52.5° | 369.5 | 368.6 | 366.4 | 363.8 | 363.7 |
| 55° | 332.7 | 331.4 | 328.3 | 326.4 | 325.7 |
| 57.5° | 292.7 | 290.3 | 286.7 | 283.9 | 284.4 |
| 60° | 264.0 | 261.5 | 256.4 | 255.2 | 255.2 |
| 62.5° | 236.3 | 233.3 | 228.2 | 226.5 | 227.5 |
| 65° | 196.6 | 192.9 | 188.4 | 187.1 | 187.8 |
| 67.5° | 160.5 | 157.2 | 152.3 | 152.3 | 151.8 |
| 70° | 137.4 | 135.5 | 131.7 | 131.7 | 131.7 |
| 72.5° | 116.7 | 115.8 | 113.0 | 113.0 | 112.5 |
| 75° | 89.5 | 89.5 | 88.2 | 87.6 | 86.9 |
| 77.5° | 67.0 | 67.3 | 66.7 | 66.0 | 64.9 |
| 80° | 52.9 | 54.2 | 53.6 | 52.9 | 52.3 |
| 82.5° | 39.8 | 41.1 | 41.0 | 39.8 | 39.7 |
| 85° | 20.8 | 22.6 | 22.7 | 22.7 | 22.7 |
| 87.5° | 5.9 | 8.6 | 10.5 | 10.7 | 11.0 |
| 90° | 1.9 | 5.6 | 12.3 | 13.3 | 12.3 |
| 92.5° | 27.0 | 98.2 | 193.8 | 84.2 | 60.9 |
| 95° | 63.6 | 223.3 | 681.6 | 352.7 | 209.8 |
| 97.5° | 102.1 | 256.0 | 1062.5 | 879.3 | 645.7 |
| 100° | 131.0 | 269.3 | 1180.9 | 1231.6 | 995.8 |
| 102.5° | 157.6 | 287.7 | 1222.7 | 1498.7 | 1322.4 |
| 105° | 206.0 | 318.3 | 1229.3 | 1813.4 | 1739.1 |
| 107.5° | 250.8 | 353.3 | 1175.6 | 2009.7 | 2034.4 |
| 110° | 285.7 | 378.6 | 1127.8 | 2062.4 | 2167.3 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 316.9 | 403.8 | 1083.7 | 2051.8 | 2228.0 |
| 115° | 362.6 | 443.4 | 1019.6 | 1973.7 | 2228.0 |
| 117.5° | 407.4 | 483.2 | 977.2 | 1854.3 | 2142.6 |
| 120° | 434.8 | 509.0 | 952.2 | 1768.6 | 2062.8 |
| 122.5° | 460.6 | 533.4 | 937.0 | 1676.8 | 1973.2 |
| 125° | 496.5 | 568.9 | 918.9 | 1550.7 | 1821.7 |
| 127.5° | 529.5 | 600.6 | 908.3 | 1447.8 | 1686.2 |
| 130° | 547.7 | 621.1 | 903.7 | 1384.2 | 1599.6 |
| 132.5° | 566.7 | 639.3 | 899.2 | 1326.9 | 1525.2 |
| 135° | 595.2 | 665.8 | 894.2 | 1252.1 | 1417.3 |
| 137.5° | 623.9 | 690.5 | 890.1 | 1191.4 | 1326.0 |
| 140° | 643.6 | 705.8 | 888.5 | 1152.3 | 1272.1 |
| 142.5° | 662.6 | 721.1 | 885.5 | 1117.1 | 1221.9 |
| 145° | 692.0 | 744.0 | 881.9 | 1071.7 | 1153.4 |
| 147.5° | 718.8 | 764.9 | 877.7 | 1030.7 | 1093.4 |
| 150° | 738.6 | 779.4 | 876.2 | 1008.4 | 1058.5 |
| 152.5° | 756.8 | 792.4 | 875.4 | 987.6 | 1028.9 |
| 155° | 781.3 | 811.9 | 874.3 | 961.4 | 993.0 |
| 157.5° | 806.7 | 828.1 | 874.5 | 943.1 | 963.9 |
| 160° | 821.1 | 838.8 | 875.3 | 931.6 | 946.5 |
| 162.5° | 832.5 | 847.2 | 876.0 | 922.4 | 933.5 |
| 165° | 850.6 | 858.9 | 878.1 | 912.4 | 917.0 |
| 167.5° | 862.9 | 868.7 | 878.3 | 903.8 | 906.0 |
| 170° | 870.5 | 873.3 | 879.1 | 899.9 | 899.9 |
| 172.5° | 876.6 | 877.1 | 879.1 | 895.4 | 894.6 |
| 175° | 882.9 | 881.9 | 879.1 | 890.4 | 888.5 |
| 177.5° | 884.9 | 882.7 | 878.9 | 886.4 | 884.2 |
| 180° | 881.9 | 881.9 | 881.9 | 881.9 | 881.9 |

(END OF REPORT)