

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: P563814

Luminaire Tested: **SQ4-PP3-150U-100D-930-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563814
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-100D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

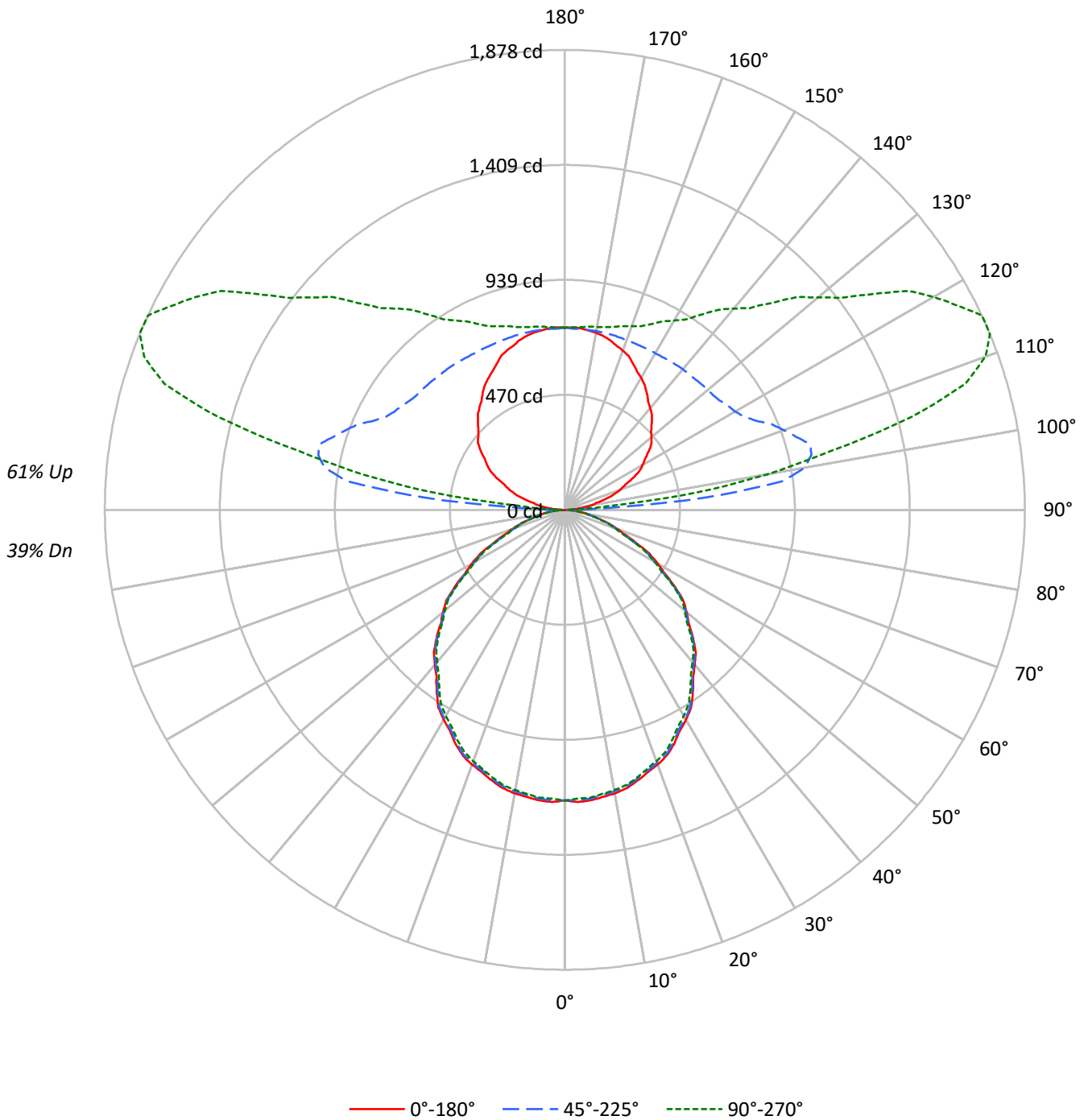
Lumens per Lamp: N/A
Luminaire Lumens: 7832.9 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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 | 104 | 104 | 104 | 104 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 |
| 1 | 95 | 91 | 87 | 84 | 87 | 83 | 80 | 77 | 68 | 66 | 64 | 54 | 52 | 51 | 41 | 40 | 39 | 33 |
| 2 | 87 | 80 | 74 | 69 | 79 | 73 | 68 | 63 | 60 | 56 | 53 | 47 | 45 | 43 | 36 | 34 | 33 | 28 |
| 3 | 79 | 70 | 63 | 57 | 72 | 64 | 58 | 53 | 53 | 48 | 44 | 42 | 39 | 36 | 32 | 30 | 28 | 24 |
| 4 | 73 | 62 | 54 | 49 | 66 | 57 | 50 | 45 | 47 | 42 | 38 | 37 | 34 | 31 | 29 | 26 | 24 | 20 |
| 5 | 67 | 55 | 47 | 42 | 60 | 51 | 44 | 39 | 42 | 37 | 33 | 33 | 30 | 27 | 26 | 23 | 21 | 18 |
| 6 | 61 | 50 | 42 | 36 | 56 | 45 | 38 | 33 | 38 | 32 | 28 | 30 | 26 | 24 | 23 | 21 | 19 | 16 |
| 7 | 57 | 45 | 37 | 31 | 51 | 41 | 34 | 29 | 34 | 29 | 25 | 27 | 24 | 21 | 21 | 19 | 17 | 14 |
| 8 | 52 | 40 | 33 | 28 | 48 | 37 | 30 | 26 | 31 | 26 | 22 | 25 | 21 | 18 | 20 | 17 | 15 | 12 |
| 9 | 49 | 37 | 30 | 25 | 44 | 34 | 27 | 23 | 28 | 23 | 20 | 23 | 19 | 17 | 18 | 15 | 13 | 11 |
| 10 | 46 | 34 | 27 | 22 | 41 | 31 | 25 | 21 | 26 | 21 | 18 | 21 | 18 | 15 | 17 | 14 | 12 | 10 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10951 | 10951 | 10951 |
| 5° | 11031 | 10964 | 10925 |
| 10° | 11013 | 10934 | 10885 |
| 15° | 10940 | 10879 | 10820 |
| 20° | 10867 | 10806 | 10724 |
| 25° | 10738 | 10664 | 10558 |
| 30° | 10540 | 10484 | 10351 |
| 35° | 10263 | 10193 | 10065 |
| 40° | 9935 | 9872 | 9759 |
| 45° | 9663 | 9595 | 9501 |
| 50° | 9317 | 9257 | 9168 |
| 55° | 8834 | 8718 | 8651 |
| 60° | 8043 | 7813 | 7774 |
| 65° | 7084 | 6789 | 6768 |
| 70° | 6118 | 5864 | 5864 |
| 75° | 5265 | 5190 | 5119 |
| 80° | 4644 | 4697 | 4585 |
| 85° | 3631 | 3959 | 3959 |



TEST NUMBER: P563814

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 112.2 | 1.4 |
| 10°-20° | 320.5 | 4.1 |
| 20°-30° | 480.0 | 6.1 |
| 30°-40° | 563.0 | 7.2 |
| 40°-50° | 564.8 | 7.2 |
| 50°-60° | 481.8 | 6.2 |
| 60°-70° | 314.2 | 4.0 |
| 70°-80° | 157.6 | 2.0 |
| 80°-90° | 45.2 | 0.6 |
| 90°-100° | 345.5 | 4.4 |
| 100°-110° | 934.2 | 11.9 |
| 110°-120° | 982.2 | 12.5 |
| 120°-130° | 797.8 | 10.2 |
| 130°-140° | 625.8 | 8.0 |
| 140°-150° | 480.3 | 6.1 |
| 150°-160° | 345.4 | 4.4 |
| 160°-170° | 211.0 | 2.7 |
| 170°-180° | 71.1 | 0.9 |
| 0°-30° | 912.7 | 11.7 |
| 0°-40° | 1475.7 | 18.8 |
| 0°-60° | 2522.3 | 32.2 |
| 0°-90° | 3039.3 | 38.8 |
| 90°-120° | 2262.0 | 28.9 |
| 90°-150° | 4166.0 | 53.2 |
| 90°-180° | 4794.0 | 61.2 |
| 0°-180° | 7832.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1187 | 1187 | 1187 | 1187 | 1187 | |
| 5° | 1191 | 1180 | 1184 | 1180 | 1180 | 113 |
| 15° | 1145 | 1134 | 1139 | 1135 | 1133 | 323 |
| 25° | 1055 | 1043 | 1048 | 1038 | 1037 | 485 |
| 35° | 911 | 902 | 905 | 895 | 894 | 569 |
| 45° | 741 | 736 | 735 | 728 | 728 | 570 |
| 55° | 549 | 547 | 542 | 539 | 538 | 488 |
| 65° | 324 | 318 | 311 | 309 | 310 | 324 |
| 75° | 148 | 148 | 146 | 145 | 144 | 160 |
| 85° | 34 | 37 | 37 | 37 | 37 | 40 |
| 90° | 2 | 5 | 10 | 11 | 10 | 5 |
| 95° | 54 | 188 | 575 | 297 | 177 | 56 |
| 105° | 174 | 268 | 1036 | 1529 | 1466 | 183 |
| 115° | 306 | 374 | 860 | 1664 | 1878 | 302 |
| 125° | 419 | 480 | 775 | 1307 | 1536 | 373 |
| 135° | 502 | 561 | 754 | 1056 | 1195 | 388 |
| 145° | 583 | 627 | 744 | 904 | 972 | 365 |
| 155° | 659 | 684 | 737 | 810 | 837 | 304 |
| 165° | 717 | 724 | 740 | 769 | 773 | 202 |
| 175° | 744 | 744 | 741 | 751 | 749 | 71 |
| 180° | 744 | 744 | 744 | 744 | 744 | |

TEST NUMBER: P563814

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|---------------|
| 0° | 1186.9 | 1186.9 | 1186.9 | 1186.9 | <i>1186.9</i> |
| 2.5° | 1194.4 | 1184.6 | 1186.9 | 1185.1 | <i>1180.2</i> |
| 5° | 1191.1 | 1179.9 | 1183.8 | 1179.6 | <i>1179.6</i> |
| 7.5° | 1182.9 | 1170.7 | 1174.6 | 1170.5 | <i>1170.3</i> |
| 10° | 1175.5 | 1163.2 | 1167.1 | 1162.9 | <i>1161.9</i> |
| 12.5° | 1164.6 | 1152.4 | 1157.1 | 1152.1 | <i>1151.9</i> |
| 15° | 1145.3 | 1134.1 | 1139.0 | 1134.8 | <i>1132.8</i> |
| 17.5° | 1123.4 | 1111.2 | 1117.2 | 1111.4 | <i>1110.5</i> |
| 20° | 1106.8 | 1094.6 | 1100.6 | 1092.2 | <i>1092.2</i> |
| 22.5° | 1086.8 | 1074.6 | 1081.4 | 1070.6 | <i>1070.6</i> |
| 25° | 1054.8 | 1042.6 | 1047.5 | 1038.1 | <i>1037.1</i> |
| 27.5° | 1016.7 | 1004.7 | 1009.8 | 999.2 | <i>999.0</i> |
| 30° | 989.3 | 978.1 | 984.1 | 972.6 | <i>971.6</i> |
| 32.5° | 959.3 | 948.9 | 953.3 | 941.8 | <i>940.8</i> |
| 35° | 911.2 | 902.1 | 905.0 | 894.6 | <i>893.6</i> |
| 37.5° | 860.7 | 851.3 | 854.6 | 845.7 | <i>845.3</i> |
| 40° | 824.9 | 818.8 | 819.7 | 812.4 | <i>810.3</i> |
| 42.5° | 791.6 | 784.7 | 785.6 | 778.3 | <i>777.9</i> |
| 45° | 740.6 | 735.6 | 735.4 | 728.2 | <i>728.2</i> |
| 47.5° | 686.5 | 682.7 | 681.6 | 675.5 | <i>675.3</i> |
| 50° | 649.1 | 646.0 | 644.9 | 639.7 | <i>638.7</i> |
| 52.5° | 610.0 | 608.6 | 605.0 | 600.6 | <i>600.4</i> |
| 55° | 549.2 | 547.2 | 542.0 | 538.8 | <i>537.8</i> |
| 57.5° | 483.3 | 479.2 | 473.3 | 468.7 | <i>469.6</i> |
| 60° | 435.9 | 431.8 | 423.4 | 421.3 | <i>421.3</i> |
| 62.5° | 390.1 | 385.2 | 376.8 | 373.9 | <i>375.5</i> |
| 65° | 324.5 | 318.4 | 311.0 | 309.0 | <i>310.0</i> |
| 67.5° | 265.0 | 259.6 | 251.5 | 251.5 | <i>250.7</i> |
| 70° | 226.8 | 223.7 | 217.4 | 217.4 | <i>217.4</i> |
| 72.5° | 192.6 | 191.2 | 186.6 | 186.6 | <i>185.8</i> |
| 75° | 147.7 | 147.7 | 145.6 | 144.6 | <i>143.6</i> |
| 77.5° | 110.7 | 111.1 | 110.1 | 109.0 | <i>107.1</i> |
| 80° | 87.4 | 89.4 | 88.4 | 87.4 | <i>86.3</i> |
| 82.5° | 65.7 | 67.8 | 67.6 | 65.7 | <i>65.5</i> |
| 85° | 34.3 | 37.4 | 37.4 | 37.4 | <i>37.4</i> |
| 87.5° | 9.5 | 13.4 | 15.4 | 15.6 | <i>16.2</i> |
| 90° | 1.6 | 4.7 | 10.4 | 11.2 | <i>10.4</i> |
| 92.5° | 22.7 | 82.8 | 163.4 | 70.9 | <i>51.4</i> |
| 95° | 53.6 | 188.2 | 574.6 | 297.4 | <i>176.9</i> |
| 97.5° | 86.1 | 215.9 | 895.7 | 741.3 | <i>544.4</i> |
| 100° | 110.4 | 227.0 | 995.6 | 1038.3 | <i>839.5</i> |
| 102.5° | 132.9 | 242.6 | 1030.8 | 1263.5 | <i>1114.8</i> |
| 105° | 173.7 | 268.4 | 1036.4 | 1528.8 | <i>1466.2</i> |
| 107.5° | 211.4 | 297.8 | 991.1 | 1694.3 | <i>1715.1</i> |
| 110° | 240.9 | 319.1 | 950.8 | 1738.7 | <i>1827.1</i> |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 267.1 | 340.4 | 913.6 | 1729.8 | 1878.3 |
| 115° | 305.7 | 373.8 | 859.5 | 1663.9 | 1878.3 |
| 117.5° | 343.5 | 407.4 | 823.8 | 1563.3 | 1806.3 |
| 120° | 366.5 | 429.1 | 802.7 | 1491.0 | 1739.1 |
| 122.5° | 388.3 | 449.7 | 789.9 | 1413.6 | 1663.5 |
| 125° | 418.6 | 479.6 | 774.7 | 1307.3 | 1535.8 |
| 127.5° | 446.4 | 506.4 | 765.7 | 1220.6 | 1421.5 |
| 130° | 461.8 | 523.6 | 761.9 | 1167.0 | 1348.5 |
| 132.5° | 477.8 | 539.0 | 758.1 | 1118.6 | 1285.8 |
| 135° | 501.8 | 561.3 | 753.9 | 1055.6 | 1194.9 |
| 137.5° | 526.0 | 582.2 | 750.4 | 1004.4 | 1117.9 |
| 140° | 542.6 | 595.0 | 749.1 | 971.5 | 1072.4 |
| 142.5° | 558.6 | 607.9 | 746.5 | 941.7 | 1030.2 |
| 145° | 583.4 | 627.3 | 743.5 | 903.5 | 972.4 |
| 147.5° | 606.0 | 644.8 | 740.0 | 868.9 | 921.8 |
| 150° | 622.6 | 657.1 | 738.7 | 850.1 | 892.4 |
| 152.5° | 638.0 | 668.1 | 738.1 | 832.6 | 867.4 |
| 155° | 658.7 | 684.5 | 737.1 | 810.5 | 837.1 |
| 157.5° | 680.1 | 698.1 | 737.3 | 795.1 | 812.6 |
| 160° | 692.3 | 707.1 | 737.9 | 785.4 | 797.9 |
| 162.5° | 701.9 | 714.2 | 738.5 | 777.6 | 787.0 |
| 165° | 717.1 | 724.1 | 740.3 | 769.2 | 773.1 |
| 167.5° | 727.5 | 732.3 | 740.5 | 761.9 | 763.8 |
| 170° | 733.9 | 736.2 | 741.1 | 758.7 | 758.7 |
| 172.5° | 739.0 | 739.5 | 741.1 | 754.8 | 754.2 |
| 175° | 744.3 | 743.5 | 741.1 | 750.7 | 749.1 |
| 177.5° | 746.1 | 744.2 | 740.9 | 747.3 | 745.4 |
| 180° | 743.5 | 743.5 | 743.5 | 743.5 | 743.5 |

(END OF REPORT)