

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: P562453

Luminaire Tested: **SQ4-PW1-150U-050D-92765-1D-UNV-STD-W-4 (2700K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562453
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, 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-PW1-150U-050D-92765-1D-UNV-STD-W-4 (2700K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

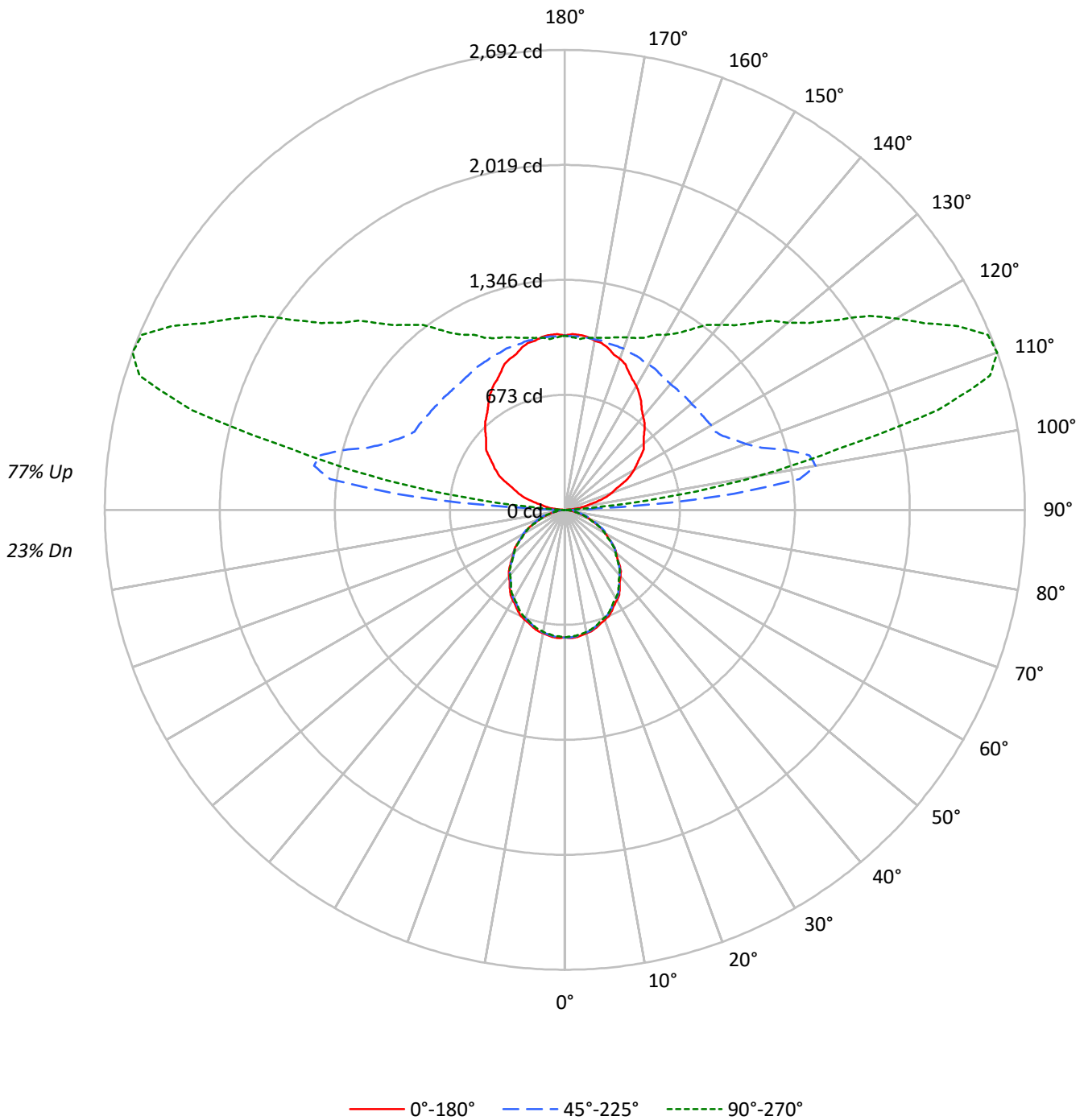
Lumens per Lamp: N/A
Luminaire Lumens: 8232.7 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.6
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



TEST NUMBER: P562453
CATALOG NUMBER: SQ4-PW1-150U-050D-92765-1D-UNV-STD-W-4 (2700K)

Luminous Intensity Polar Plot





TEST NUMBER: P562453

CATALOG NUMBER: SQ4-PW1-150U-050D-92765-1D-UNV-STD-W-4 (2700K)

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 | 101 | 101 | 101 | 101 | 89 | 89 | 89 | 89 | 68 | 68 | 68 | 49 | 49 | 49 | 31 | 31 | 31 | 23 |
| 1 | 92 | 88 | 84 | 81 | 81 | 78 | 75 | 72 | 60 | 58 | 56 | 43 | 42 | 41 | 28 | 27 | 27 | 20 |
| 2 | 84 | 77 | 71 | 66 | 74 | 68 | 63 | 59 | 52 | 49 | 46 | 38 | 36 | 34 | 24 | 23 | 22 | 16 |
| 3 | 76 | 67 | 60 | 55 | 67 | 60 | 54 | 49 | 46 | 42 | 39 | 33 | 31 | 29 | 22 | 20 | 19 | 14 |
| 4 | 70 | 59 | 52 | 46 | 62 | 53 | 47 | 42 | 41 | 37 | 33 | 30 | 27 | 25 | 19 | 18 | 16 | 12 |
| 5 | 64 | 53 | 45 | 39 | 56 | 47 | 41 | 36 | 37 | 32 | 28 | 27 | 24 | 21 | 17 | 16 | 14 | 10 |
| 6 | 59 | 47 | 39 | 34 | 52 | 42 | 36 | 31 | 33 | 28 | 25 | 24 | 21 | 18 | 16 | 14 | 13 | 9 |
| 7 | 54 | 42 | 35 | 29 | 48 | 38 | 31 | 27 | 30 | 25 | 21 | 22 | 19 | 16 | 14 | 13 | 11 | 8 |
| 8 | 50 | 38 | 31 | 26 | 44 | 34 | 28 | 24 | 27 | 22 | 19 | 20 | 17 | 14 | 13 | 11 | 10 | 7 |
| 9 | 46 | 35 | 28 | 23 | 41 | 31 | 25 | 21 | 24 | 20 | 17 | 18 | 15 | 13 | 12 | 10 | 9 | 7 |
| 10 | 43 | 32 | 25 | 20 | 38 | 29 | 23 | 18 | 22 | 18 | 15 | 17 | 14 | 11 | 11 | 9 | 8 | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6892 | 6892 | 6892 |
| 5° | 6937 | 6882 | 6852 |
| 10° | 6881 | 6826 | 6788 |
| 15° | 6808 | 6733 | 6708 |
| 20° | 6728 | 6623 | 6611 |
| 25° | 6633 | 6512 | 6493 |
| 30° | 6493 | 6394 | 6353 |
| 35° | 6308 | 6219 | 6182 |
| 40° | 6111 | 6016 | 5993 |
| 45° | 5874 | 5797 | 5771 |
| 50° | 5631 | 5583 | 5545 |
| 55° | 5368 | 5368 | 5282 |
| 60° | 5039 | 5137 | 4954 |
| 65° | 4613 | 4842 | 4497 |
| 70° | 4065 | 4456 | 3960 |
| 75° | 3472 | 3989 | 3379 |
| 80° | 2694 | 3358 | 2726 |
| 85° | 1747 | 2583 | 2297 |



TEST NUMBER: P562453

CATALOG NUMBER: SQ4-PW1-150U-050D-92765-1D-UNV-STD-W-4 (2700K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 70.3 | 0.9 |
| 10°-20° | 198.6 | 2.4 |
| 20°-30° | 294.6 | 3.6 |
| 30°-40° | 344.7 | 4.2 |
| 40°-50° | 343.2 | 4.2 |
| 50°-60° | 296.3 | 3.6 |
| 60°-70° | 213.3 | 2.6 |
| 70°-80° | 111.9 | 1.4 |
| 80°-90° | 27.7 | 0.3 |
| 90°-100° | 464.5 | 5.6 |
| 100°-110° | 1321.7 | 16.1 |
| 110°-120° | 1266.3 | 15.4 |
| 120°-130° | 1002.2 | 12.2 |
| 130°-140° | 804.5 | 9.8 |
| 140°-150° | 629.8 | 7.6 |
| 150°-160° | 460.8 | 5.6 |
| 160°-170° | 285.4 | 3.5 |
| 170°-180° | 96.9 | 1.2 |
| 0°-30° | 563.5 | 6.8 |
| 0°-40° | 908.2 | 11.0 |
| 0°-60° | 1547.7 | 18.8 |
| 0°-90° | 1900.6 | 23.1 |
| 90°-120° | 3052.5 | 37.1 |
| 90°-150° | 5489.0 | 66.7 |
| 90°-180° | 6332.0 | 76.9 |
| 0°-180° | 8232.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 747 | 747 | 747 | 747 | 747 | |
| 5° | 749 | 741 | 743 | 741 | 740 | 71 |
| 15° | 713 | 704 | 705 | 704 | 702 | 201 |
| 25° | 652 | 641 | 640 | 636 | 638 | 300 |
| 35° | 560 | 552 | 552 | 547 | 549 | 350 |
| 45° | 450 | 446 | 444 | 443 | 442 | 347 |
| 55° | 334 | 333 | 334 | 329 | 328 | 298 |
| 65° | 211 | 218 | 222 | 213 | 206 | 209 |
| 75° | 97 | 106 | 112 | 104 | 95 | 104 |
| 85° | 16 | 22 | 24 | 23 | 22 | 22 |
| 90° | 0 | 0 | 0 | 0 | 0 | 3 |
| 95° | 50 | 200 | 899 | 311 | 192 | 58 |
| 105° | 205 | 312 | 1347 | 2379 | 2262 | 217 |
| 115° | 382 | 461 | 1021 | 2164 | 2541 | 376 |
| 125° | 539 | 598 | 975 | 1618 | 1934 | 482 |
| 135° | 659 | 714 | 963 | 1366 | 1545 | 508 |
| 145° | 777 | 817 | 971 | 1183 | 1289 | 485 |
| 155° | 888 | 908 | 994 | 1069 | 1112 | 410 |
| 165° | 981 | 984 | 1006 | 1028 | 1043 | 276 |
| 175° | 1027 | 1022 | 1018 | 1012 | 1004 | 97 |
| 180° | 1019 | 1019 | 1019 | 1019 | 1019 | |

TEST NUMBER: P562453

CATALOG NUMBER: SQ4-PW1-150U-050D-92765-1D-UNV-STD-W-4 (2700K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 0° | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 |
| 2.5° | 751.2 | 745.1 | 747.0 | 745.4 | 741.8 |
| 5° | 749.0 | 740.6 | 743.1 | 741.1 | 739.8 |
| 7.5° | 741.4 | 733.6 | 735.4 | 733.3 | 732.5 |
| 10° | 734.5 | 726.8 | 728.6 | 725.9 | 724.6 |
| 12.5° | 726.6 | 718.4 | 720.2 | 717.5 | 716.7 |
| 15° | 712.8 | 703.8 | 704.9 | 703.6 | 702.3 |
| 17.5° | 696.7 | 687.6 | 687.8 | 685.7 | 685.4 |
| 20° | 685.2 | 675.5 | 674.6 | 672.0 | 673.3 |
| 22.5° | 672.5 | 662.3 | 661.5 | 657.8 | 659.6 |
| 25° | 651.6 | 640.6 | 639.7 | 635.8 | 637.8 |
| 27.5° | 627.4 | 616.6 | 616.6 | 611.1 | 613.1 |
| 30° | 609.5 | 599.2 | 600.2 | 593.7 | 596.3 |
| 32.5° | 590.5 | 581.2 | 581.8 | 575.3 | 577.9 |
| 35° | 560.1 | 552.4 | 552.2 | 547.0 | 548.9 |
| 37.5° | 529.0 | 522.2 | 521.1 | 518.1 | 518.6 |
| 40° | 507.4 | 501.7 | 499.5 | 497.6 | 497.6 |
| 42.5° | 484.8 | 479.5 | 477.4 | 476.0 | 475.5 |
| 45° | 450.2 | 446.3 | 444.3 | 442.9 | 442.3 |
| 47.5° | 416.0 | 412.4 | 410.6 | 409.6 | 409.0 |
| 50° | 392.3 | 389.7 | 389.0 | 387.0 | 386.3 |
| 52.5° | 368.6 | 367.0 | 366.3 | 363.8 | 363.2 |
| 55° | 333.7 | 333.0 | 333.7 | 329.1 | 328.4 |
| 57.5° | 297.4 | 298.4 | 300.5 | 294.3 | 292.8 |
| 60° | 273.1 | 275.7 | 278.4 | 271.1 | 268.5 |
| 62.5° | 248.4 | 252.5 | 256.3 | 247.9 | 244.3 |
| 65° | 211.3 | 217.7 | 221.8 | 213.1 | 206.0 |
| 67.5° | 175.5 | 183.4 | 188.4 | 179.0 | 171.0 |
| 70° | 150.7 | 159.7 | 165.2 | 155.8 | 146.8 |
| 72.5° | 129.1 | 139.2 | 143.6 | 134.7 | 125.7 |
| 75° | 97.4 | 106.4 | 111.9 | 104.4 | 94.8 |
| 77.5° | 69.1 | 77.6 | 82.1 | 75.6 | 67.7 |
| 80° | 50.7 | 59.7 | 63.2 | 57.8 | 51.3 |
| 82.5° | 35.9 | 43.4 | 45.8 | 42.5 | 38.2 |
| 85° | 16.5 | 21.6 | 24.4 | 23.0 | 21.7 |
| 87.5° | 4.2 | 7.8 | 10.0 | 10.0 | 10.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 15.5 | 82.2 | 190.7 | 55.5 | 41.9 |
| 95° | 50.4 | 200.1 | 899.2 | 311.2 | 191.9 |
| 97.5° | 92.6 | 234.4 | 1384.9 | 991.0 | 679.1 |
| 100° | 122.1 | 254.7 | 1490.3 | 1509.6 | 1162.8 |
| 102.5° | 154.7 | 276.7 | 1467.1 | 1932.3 | 1629.5 |
| 105° | 205.4 | 311.5 | 1346.9 | 2379.1 | 2261.7 |
| 107.5° | 257.0 | 352.1 | 1206.6 | 2505.1 | 2609.7 |
| 110° | 292.6 | 381.7 | 1126.0 | 2456.9 | 2691.9 |



TEST NUMBER: P562453

CATALOG NUMBER: SQ4-PW1-150U-050D-92765-1D-UNV-STD-W-4 (2700K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 326.7 | 411.3 | 1071.7 | 2342.9 | 2677.9 |
| 115° | 381.8 | 461.4 | 1021.3 | 2163.6 | 2540.7 |
| 117.5° | 430.2 | 504.9 | 991.5 | 1967.6 | 2367.1 |
| 120° | 469.0 | 531.5 | 988.4 | 1855.6 | 2238.4 |
| 122.5° | 500.0 | 562.5 | 980.6 | 1757.3 | 2112.8 |
| 125° | 538.8 | 597.5 | 974.8 | 1617.7 | 1934.1 |
| 127.5° | 581.0 | 636.0 | 971.7 | 1534.2 | 1795.0 |
| 130° | 602.7 | 657.7 | 967.1 | 1476.1 | 1703.5 |
| 132.5° | 626.0 | 679.4 | 967.1 | 1430.7 | 1639.9 |
| 135° | 658.9 | 713.9 | 963.2 | 1366.5 | 1544.6 |
| 137.5° | 689.9 | 743.4 | 962.8 | 1312.0 | 1465.9 |
| 140° | 713.2 | 768.1 | 961.3 | 1266.9 | 1414.7 |
| 142.5° | 739.5 | 785.4 | 965.9 | 1230.9 | 1363.6 |
| 145° | 777.1 | 816.9 | 970.9 | 1182.7 | 1288.8 |
| 147.5° | 809.3 | 848.0 | 979.5 | 1133.9 | 1225.6 |
| 150° | 837.2 | 863.7 | 982.6 | 1117.8 | 1182.2 |
| 152.5° | 858.9 | 887.0 | 985.7 | 1095.9 | 1155.8 |
| 155° | 887.6 | 908.5 | 994.2 | 1068.8 | 1112.4 |
| 157.5° | 923.3 | 935.8 | 996.1 | 1056.5 | 1087.6 |
| 160° | 941.9 | 951.3 | 1003.9 | 1047.1 | 1073.7 |
| 162.5° | 952.7 | 963.7 | 1005.4 | 1039.2 | 1059.7 |
| 165° | 980.6 | 984.4 | 1005.8 | 1027.5 | 1042.6 |
| 167.5° | 999.6 | 996.2 | 1014.7 | 1024.6 | 1030.6 |
| 170° | 1005.8 | 1003.9 | 1011.6 | 1013.7 | 1021.3 |
| 172.5° | 1019.8 | 1013.3 | 1016.3 | 1010.6 | 1016.7 |
| 175° | 1027.1 | 1021.5 | 1017.5 | 1011.5 | 1003.9 |
| 177.5° | 1030.2 | 1021.1 | 1016.3 | 1010.1 | 1011.6 |
| 180° | 1019.4 | 1019.4 | 1019.4 | 1019.4 | 1019.4 |

(END OF REPORT)