

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: P565058

Luminaire Tested: **SQ4-PW1-125U-100D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565058
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-PW1-125U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

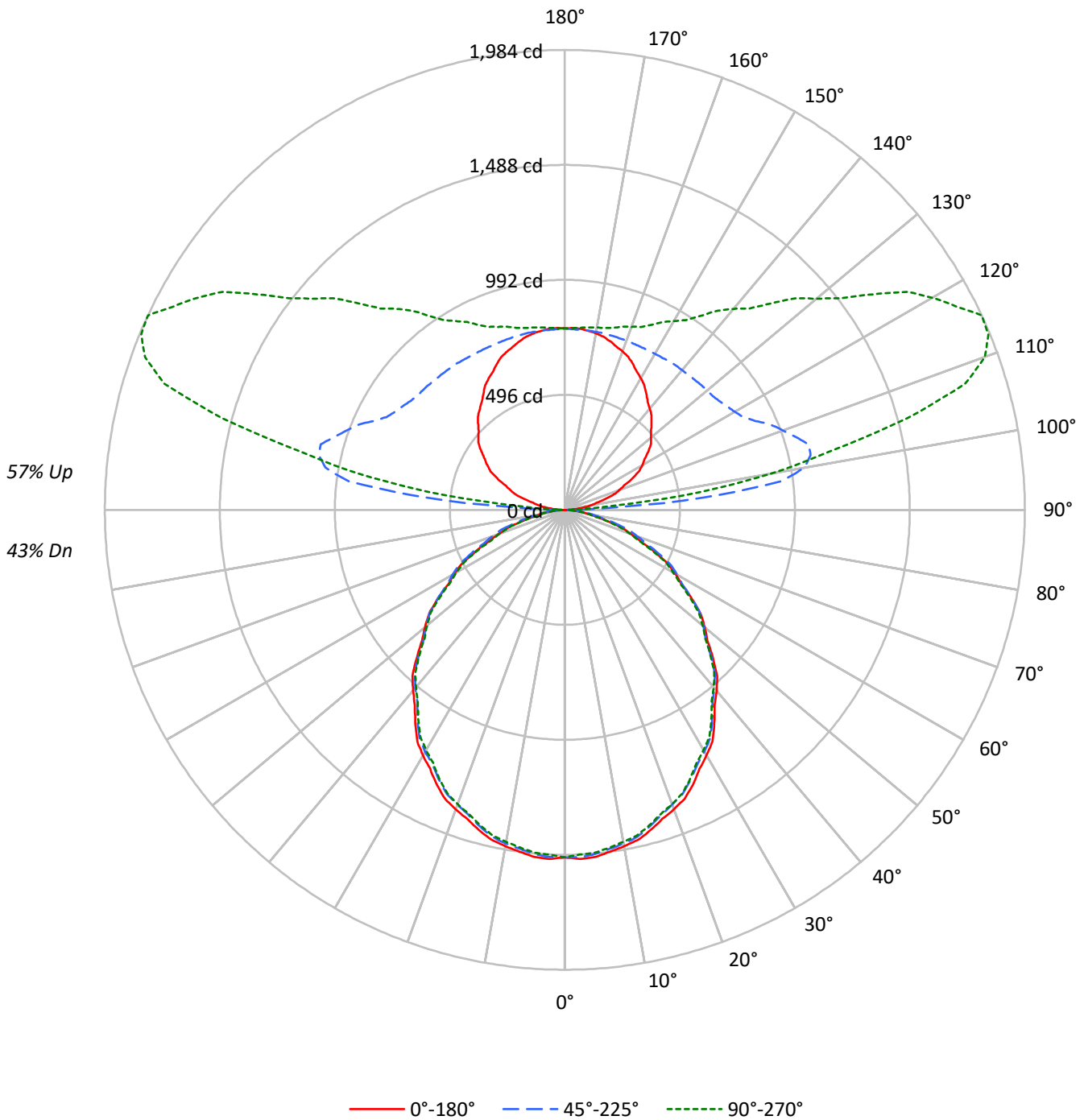
Lumens per Lamp: N/A
Luminaire Lumens: 8865.3 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 64.5
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: P565058

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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 | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 | 43 |
| 1 | 96 | 92 | 88 | 85 | 88 | 84 | 81 | 78 | 70 | 67 | 65 | 56 | 55 | 53 | 44 | 43 | 42 | 36 |
| 2 | 88 | 80 | 74 | 69 | 80 | 74 | 69 | 64 | 61 | 57 | 54 | 50 | 47 | 45 | 39 | 37 | 36 | 31 |
| 3 | 80 | 71 | 64 | 58 | 73 | 65 | 59 | 54 | 54 | 49 | 46 | 44 | 41 | 38 | 34 | 32 | 30 | 26 |
| 4 | 73 | 63 | 55 | 49 | 67 | 58 | 51 | 45 | 48 | 43 | 39 | 39 | 35 | 32 | 31 | 28 | 26 | 22 |
| 5 | 67 | 56 | 48 | 42 | 61 | 51 | 44 | 39 | 43 | 38 | 33 | 35 | 31 | 28 | 28 | 25 | 23 | 19 |
| 6 | 62 | 50 | 42 | 36 | 56 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 25 | 25 | 22 | 20 | 17 |
| 7 | 57 | 45 | 37 | 32 | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 20 | 18 | 15 |
| 8 | 53 | 41 | 33 | 28 | 48 | 38 | 31 | 26 | 32 | 27 | 23 | 26 | 22 | 19 | 21 | 18 | 16 | 14 |
| 9 | 49 | 37 | 30 | 25 | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 17 | 14 | 12 |
| 10 | 46 | 34 | 27 | 22 | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 16 | 18 | 15 | 13 | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13830 | 13830 | 13830 |
| 5° | 13919 | 13810 | 13748 |
| 10° | 13808 | 13697 | 13623 |
| 15° | 13662 | 13511 | 13460 |
| 20° | 13498 | 13291 | 13266 |
| 25° | 13310 | 13068 | 13027 |
| 30° | 13029 | 12832 | 12747 |
| 35° | 12659 | 12481 | 12406 |
| 40° | 12263 | 12073 | 12025 |
| 45° | 11786 | 11632 | 11580 |
| 50° | 11298 | 11203 | 11127 |
| 55° | 10771 | 10771 | 10600 |
| 60° | 10114 | 10308 | 9942 |
| 65° | 9254 | 9717 | 9025 |
| 70° | 8157 | 8942 | 7944 |
| 75° | 6969 | 8003 | 6780 |
| 80° | 5403 | 6737 | 5473 |
| 85° | 3493 | 5176 | 4615 |



TEST NUMBER: P565058

CATALOG NUMBER: SQ4-PW1-125U-100D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 141.2 | 1.6 |
| 10°-20° | 398.5 | 4.5 |
| 20°-30° | 591.1 | 6.7 |
| 30°-40° | 691.7 | 7.8 |
| 40°-50° | 688.6 | 7.8 |
| 50°-60° | 594.6 | 6.7 |
| 60°-70° | 428.0 | 4.8 |
| 70°-80° | 224.5 | 2.5 |
| 80°-90° | 57.5 | 0.6 |
| 90°-100° | 365.9 | 4.1 |
| 100°-110° | 985.7 | 11.1 |
| 110°-120° | 1034.5 | 11.7 |
| 120°-130° | 839.4 | 9.5 |
| 130°-140° | 658.3 | 7.4 |
| 140°-150° | 505.4 | 5.7 |
| 150°-160° | 363.4 | 4.1 |
| 160°-170° | 222.0 | 2.5 |
| 170°-180° | 74.9 | 0.8 |
| 0°-30° | 1130.8 | 12.8 |
| 0°-40° | 1822.5 | 20.6 |
| 0°-60° | 3105.7 | 35.0 |
| 0°-90° | 3815.6 | 43.0 |
| 90°-120° | 2386.1 | 26.9 |
| 90°-150° | 4389.3 | 49.5 |
| 90°-180° | 5050.0 | 57.0 |
| 0°-180° | 8865.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1499 | 1499 | 1499 | 1499 | 1499 | |
| 5° | 1503 | 1486 | 1491 | 1487 | 1484 | 142 |
| 15° | 1430 | 1412 | 1414 | 1412 | 1409 | 403 |
| 25° | 1308 | 1286 | 1284 | 1276 | 1280 | 601 |
| 35° | 1124 | 1108 | 1108 | 1098 | 1102 | 703 |
| 45° | 903 | 896 | 892 | 889 | 888 | 697 |
| 55° | 670 | 668 | 670 | 660 | 659 | 597 |
| 65° | 424 | 437 | 445 | 428 | 413 | 420 |
| 75° | 196 | 214 | 224 | 210 | 190 | 210 |
| 85° | 33 | 43 | 49 | 46 | 44 | 44 |
| 90° | 2 | 6 | 12 | 13 | 13 | 5 |
| 95° | 56 | 199 | 600 | 307 | 212 | 58 |
| 105° | 182 | 284 | 1090 | 1631 | 1530 | 192 |
| 115° | 322 | 394 | 908 | 1754 | 1984 | 317 |
| 125° | 439 | 505 | 815 | 1378 | 1621 | 392 |
| 135° | 529 | 590 | 792 | 1111 | 1258 | 408 |
| 145° | 612 | 660 | 782 | 950 | 1020 | 384 |
| 155° | 694 | 720 | 775 | 853 | 880 | 320 |
| 165° | 753 | 762 | 778 | 809 | 813 | 212 |
| 175° | 783 | 782 | 779 | 790 | 788 | 74 |
| 180° | 782 | 782 | 782 | 782 | 782 | |

TEST NUMBER: P565058

CATALOG NUMBER: SQ4-PW1-125U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1499.0 | 1499.0 | 1499.0 | 1499.0 | 1499.0 |
| 2.5° | 1507.4 | 1495.0 | 1499.0 | 1495.6 | 1488.4 |
| 5° | 1502.9 | 1486.2 | 1491.1 | 1487.0 | 1484.4 |
| 7.5° | 1487.6 | 1472.1 | 1475.7 | 1471.5 | 1469.9 |
| 10° | 1473.9 | 1458.4 | 1462.0 | 1456.7 | 1454.1 |
| 12.5° | 1458.0 | 1441.5 | 1445.1 | 1439.8 | 1438.2 |
| 15° | 1430.3 | 1412.2 | 1414.5 | 1411.8 | 1409.2 |
| 17.5° | 1398.1 | 1379.7 | 1380.1 | 1375.9 | 1375.4 |
| 20° | 1374.8 | 1355.5 | 1353.7 | 1348.5 | 1351.1 |
| 22.5° | 1349.5 | 1329.1 | 1327.3 | 1320.0 | 1323.6 |
| 25° | 1307.5 | 1285.5 | 1283.7 | 1275.9 | 1279.7 |
| 27.5° | 1258.9 | 1237.2 | 1237.2 | 1226.2 | 1230.3 |
| 30° | 1223.0 | 1202.3 | 1204.5 | 1191.4 | 1196.5 |
| 32.5° | 1184.9 | 1166.3 | 1167.5 | 1154.4 | 1159.6 |
| 35° | 1123.9 | 1108.4 | 1108.1 | 1097.6 | 1101.5 |
| 37.5° | 1061.6 | 1047.9 | 1045.7 | 1039.7 | 1040.7 |
| 40° | 1018.2 | 1006.6 | 1002.4 | 998.4 | 998.4 |
| 42.5° | 972.8 | 962.2 | 958.0 | 955.1 | 954.1 |
| 45° | 903.3 | 895.6 | 891.5 | 888.8 | 887.5 |
| 47.5° | 834.7 | 827.4 | 823.8 | 822.0 | 820.7 |
| 50° | 787.1 | 782.0 | 780.5 | 776.5 | 775.2 |
| 52.5° | 739.6 | 736.5 | 735.1 | 730.0 | 728.8 |
| 55° | 669.6 | 668.3 | 669.6 | 660.3 | 659.0 |
| 57.5° | 596.7 | 598.8 | 603.0 | 590.5 | 587.4 |
| 60° | 548.1 | 553.2 | 558.6 | 544.0 | 538.8 |
| 62.5° | 498.4 | 506.7 | 514.3 | 497.5 | 490.2 |
| 65° | 423.9 | 436.9 | 445.1 | 427.6 | 413.4 |
| 67.5° | 352.1 | 368.1 | 378.0 | 359.1 | 343.1 |
| 70° | 302.4 | 320.5 | 331.5 | 312.6 | 294.5 |
| 72.5° | 259.1 | 279.3 | 288.2 | 270.3 | 252.3 |
| 75° | 195.5 | 213.5 | 224.5 | 209.5 | 190.2 |
| 77.5° | 138.7 | 155.7 | 164.8 | 151.8 | 135.8 |
| 80° | 101.7 | 119.8 | 126.8 | 115.9 | 103.0 |
| 82.5° | 72.1 | 87.1 | 91.9 | 85.4 | 76.6 |
| 85° | 33.0 | 43.3 | 48.9 | 46.2 | 43.6 |
| 87.5° | 8.9 | 16.9 | 22.5 | 22.7 | 23.7 |
| 90° | 2.0 | 5.9 | 12.0 | 13.0 | 13.0 |
| 92.5° | 24.3 | 85.9 | 169.8 | 81.7 | 56.8 |
| 95° | 55.8 | 199.0 | 599.9 | 306.8 | 212.2 |
| 97.5° | 89.1 | 227.8 | 940.8 | 786.0 | 592.7 |
| 100° | 114.6 | 239.3 | 1049.3 | 1097.8 | 910.8 |
| 102.5° | 139.3 | 255.4 | 1085.1 | 1331.4 | 1177.8 |
| 105° | 182.3 | 283.7 | 1090.1 | 1630.9 | 1530.5 |
| 107.5° | 223.0 | 313.4 | 1043.7 | 1784.8 | 1810.7 |
| 110° | 250.1 | 335.8 | 1001.4 | 1832.6 | 1927.1 |

TEST NUMBER: P565058

CATALOG NUMBER: SQ4-PW1-125U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 278.8 | 358.3 | 960.8 | 1822.0 | 1977.3 |
| 115° | 321.9 | 394.0 | 907.8 | 1754.0 | 1983.9 |
| 117.5° | 361.1 | 428.7 | 866.7 | 1645.4 | 1901.4 |
| 120° | 386.6 | 451.9 | 846.0 | 1567.4 | 1830.5 |
| 122.5° | 408.9 | 473.4 | 830.8 | 1487.7 | 1750.0 |
| 125° | 439.4 | 504.7 | 815.1 | 1377.6 | 1621.2 |
| 127.5° | 468.7 | 533.0 | 805.1 | 1280.6 | 1498.1 |
| 130° | 486.3 | 550.6 | 801.1 | 1225.0 | 1416.0 |
| 132.5° | 503.8 | 567.3 | 797.2 | 1176.0 | 1351.4 |
| 135° | 529.1 | 590.5 | 792.2 | 1111.4 | 1258.5 |
| 137.5° | 553.2 | 612.1 | 789.6 | 1056.6 | 1177.4 |
| 140° | 570.0 | 626.5 | 787.2 | 1022.8 | 1132.0 |
| 142.5° | 587.5 | 640.1 | 785.6 | 991.4 | 1083.3 |
| 145° | 611.8 | 659.6 | 782.2 | 950.2 | 1020.4 |
| 147.5° | 638.1 | 679.6 | 778.8 | 915.6 | 970.7 |
| 150° | 655.7 | 691.7 | 777.2 | 893.9 | 939.6 |
| 152.5° | 671.6 | 703.0 | 776.4 | 876.1 | 913.3 |
| 155° | 694.5 | 719.9 | 775.2 | 852.6 | 879.9 |
| 157.5° | 714.7 | 734.3 | 775.4 | 836.0 | 854.4 |
| 160° | 727.4 | 744.0 | 776.2 | 826.4 | 840.0 |
| 162.5° | 738.6 | 752.0 | 777.0 | 818.3 | 828.0 |
| 165° | 753.3 | 762.1 | 778.2 | 809.2 | 813.1 |
| 167.5° | 765.3 | 770.3 | 779.2 | 802.2 | 803.7 |
| 170° | 773.2 | 775.2 | 779.2 | 798.2 | 798.2 |
| 172.5° | 778.0 | 778.4 | 780.0 | 794.2 | 794.2 |
| 175° | 783.2 | 782.2 | 779.2 | 790.1 | 788.2 |
| 177.5° | 785.4 | 783.8 | 779.8 | 786.2 | 784.6 |
| 180° | 782.2 | 782.2 | 782.2 | 782.2 | 782.2 |

(END OF REPORT)