

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: P564326

Luminaire Tested: **SQ4-PR1-100U-125D-940-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564326
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-125D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

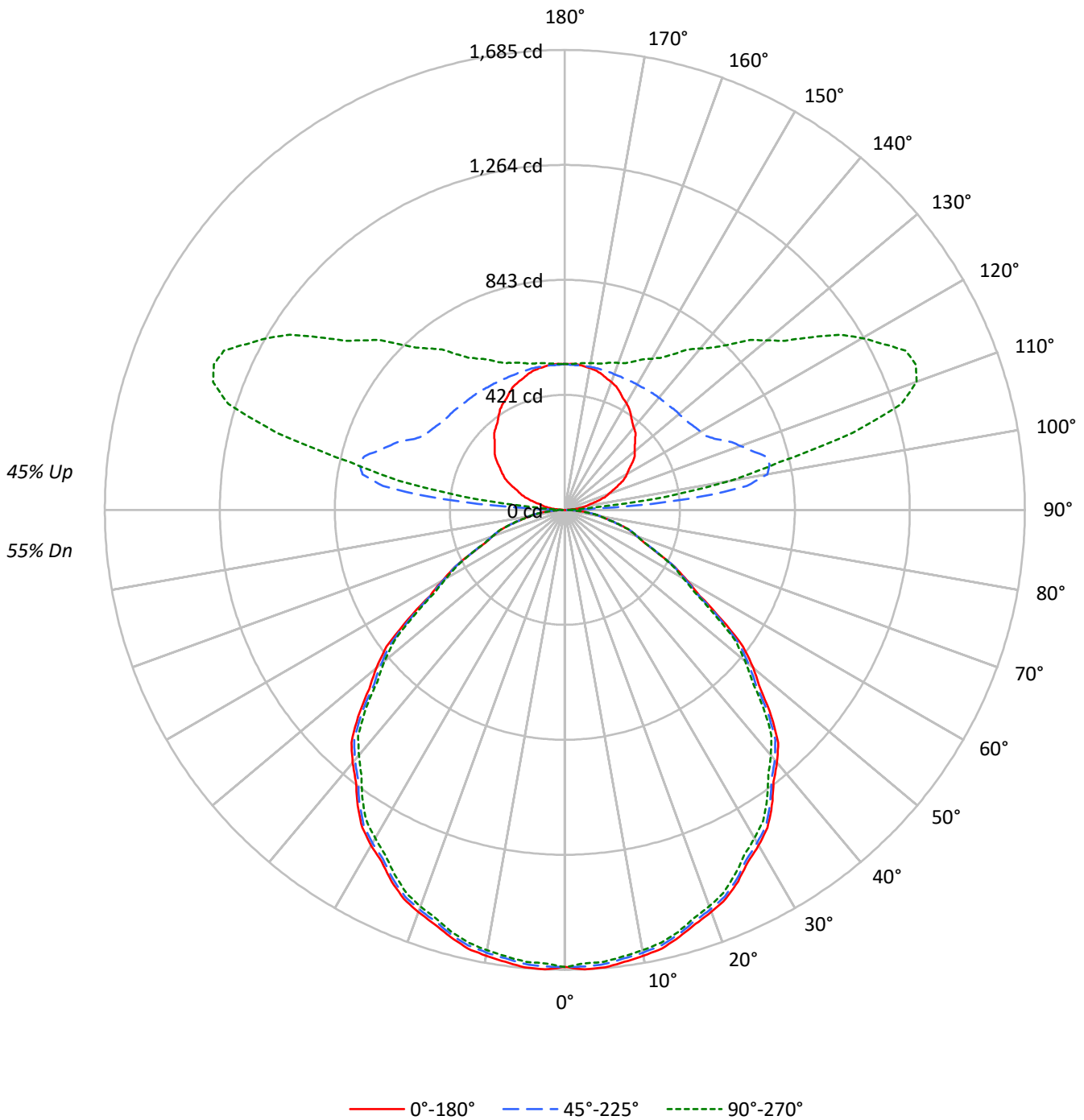
Lumens per Lamp: N/A
Luminaire Lumens: 7659.7 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 86 | 86 | 86 | 73 | 73 | 73 | 60 | 60 | 60 | 55 |
| 1 | 99 | 95 | 91 | 88 | 92 | 88 | 85 | 82 | 76 | 73 | 71 | 64 | 63 | 61 | 54 | 53 | 52 | 47 |
| 2 | 91 | 83 | 77 | 72 | 84 | 78 | 72 | 68 | 67 | 63 | 60 | 57 | 54 | 52 | 48 | 46 | 44 | 40 |
| 3 | 83 | 73 | 66 | 60 | 77 | 69 | 62 | 57 | 59 | 54 | 50 | 51 | 47 | 44 | 43 | 40 | 38 | 34 |
| 4 | 76 | 65 | 57 | 51 | 70 | 61 | 54 | 49 | 53 | 47 | 43 | 45 | 41 | 38 | 38 | 35 | 33 | 29 |
| 5 | 70 | 58 | 50 | 44 | 65 | 54 | 47 | 42 | 47 | 42 | 37 | 41 | 36 | 33 | 35 | 31 | 29 | 26 |
| 6 | 64 | 52 | 44 | 38 | 60 | 49 | 42 | 37 | 43 | 37 | 33 | 37 | 32 | 29 | 31 | 28 | 25 | 23 |
| 7 | 60 | 47 | 39 | 34 | 55 | 44 | 37 | 32 | 39 | 33 | 29 | 34 | 29 | 26 | 29 | 25 | 23 | 20 |
| 8 | 55 | 43 | 35 | 30 | 51 | 40 | 33 | 29 | 35 | 30 | 26 | 31 | 26 | 23 | 26 | 23 | 20 | 18 |
| 9 | 51 | 39 | 32 | 27 | 48 | 37 | 30 | 26 | 33 | 27 | 23 | 28 | 24 | 21 | 24 | 21 | 18 | 16 |
| 10 | 48 | 36 | 29 | 24 | 45 | 34 | 27 | 23 | 30 | 25 | 21 | 26 | 22 | 19 | 23 | 19 | 17 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15451 | 15451 | 15451 |
| 5° | 15590 | 15470 | 15390 |
| 10° | 15541 | 15433 | 15351 |
| 15° | 15473 | 15376 | 15293 |
| 20° | 15394 | 15295 | 15182 |
| 25° | 15286 | 15183 | 15007 |
| 30° | 15122 | 15014 | 14799 |
| 35° | 14898 | 14768 | 14556 |
| 40° | 14559 | 14402 | 14142 |
| 45° | 13965 | 13720 | 13438 |
| 50° | 12920 | 12609 | 12360 |
| 55° | 11276 | 11022 | 10788 |
| 60° | 9503 | 9422 | 9235 |
| 65° | 8219 | 8250 | 8187 |
| 70° | 7548 | 7588 | 7588 |
| 75° | 7251 | 7251 | 7301 |
| 80° | 6822 | 6896 | 6822 |
| 85° | 5494 | 6108 | 6108 |



TEST NUMBER: P564326

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 158.4 | 2.1 |
| 10°-20° | 453.1 | 5.9 |
| 20°-30° | 683.4 | 8.9 |
| 30°-40° | 814.3 | 10.6 |
| 40°-50° | 802.8 | 10.5 |
| 50°-60° | 613.6 | 8.0 |
| 60°-70° | 379.7 | 5.0 |
| 70°-80° | 215.7 | 2.8 |
| 80°-90° | 66.7 | 0.9 |
| 90°-100° | 250.2 | 3.3 |
| 100°-110° | 690.9 | 9.0 |
| 110°-120° | 712.5 | 9.3 |
| 120°-130° | 572.6 | 7.5 |
| 130°-140° | 450.0 | 5.9 |
| 140°-150° | 345.1 | 4.5 |
| 150°-160° | 248.0 | 3.2 |
| 160°-170° | 151.7 | 2.0 |
| 170°-180° | 51.1 | 0.7 |
| 0°-30° | 1294.9 | 16.9 |
| 0°-40° | 2109.2 | 27.5 |
| 0°-60° | 3525.6 | 46.0 |
| 0°-90° | 4187.6 | 54.7 |
| 90°-120° | 1653.6 | 21.6 |
| 90°-150° | 3021.2 | 39.4 |
| 90°-180° | 3472.0 | 45.3 |
| 0°-180° | 7659.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1675 | 1675 | 1675 | 1675 | 1675 | |
| 5° | 1683 | 1665 | 1670 | 1664 | 1662 | 160 |
| 15° | 1620 | 1603 | 1610 | 1604 | 1601 | 457 |
| 25° | 1502 | 1483 | 1492 | 1476 | 1474 | 691 |
| 35° | 1323 | 1307 | 1311 | 1294 | 1292 | 826 |
| 45° | 1070 | 1056 | 1052 | 1033 | 1030 | 820 |
| 55° | 701 | 690 | 685 | 674 | 671 | 628 |
| 65° | 376 | 374 | 378 | 375 | 375 | 381 |
| 75° | 203 | 203 | 203 | 205 | 205 | 215 |
| 85° | 52 | 55 | 58 | 58 | 58 | 60 |
| 90° | 2 | 3 | 7 | 8 | 8 | 5 |
| 95° | 37 | 135 | 454 | 187 | 121 | 39 |
| 105° | 123 | 190 | 760 | 1160 | 1093 | 131 |
| 115° | 221 | 267 | 612 | 1212 | 1378 | 217 |
| 125° | 303 | 344 | 555 | 939 | 1102 | 269 |
| 135° | 364 | 404 | 540 | 761 | 858 | 282 |
| 145° | 422 | 452 | 533 | 648 | 697 | 264 |
| 155° | 476 | 492 | 528 | 581 | 599 | 219 |
| 165° | 516 | 522 | 531 | 552 | 556 | 145 |
| 175° | 534 | 535 | 532 | 540 | 538 | 51 |
| 180° | 534 | 534 | 534 | 534 | 534 | |

TEST NUMBER: P564326

CATALOG NUMBER: SQ4-PR1-100U-125D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1674.7 | 1674.7 | 1674.7 | 1674.7 | 1674.7 |
| 2.5° | 1685.1 | 1670.4 | 1674.7 | 1671.0 | 1663.1 |
| 5° | 1683.3 | 1665.0 | 1670.4 | 1664.5 | 1661.7 |
| 7.5° | 1670.4 | 1652.3 | 1657.7 | 1651.9 | 1650.2 |
| 10° | 1658.8 | 1641.9 | 1647.3 | 1641.4 | 1638.6 |
| 12.5° | 1646.1 | 1628.1 | 1634.6 | 1627.6 | 1624.8 |
| 15° | 1619.9 | 1602.9 | 1609.8 | 1603.9 | 1601.1 |
| 17.5° | 1591.0 | 1573.0 | 1579.8 | 1573.1 | 1569.4 |
| 20° | 1567.9 | 1551.0 | 1557.8 | 1547.7 | 1546.3 |
| 22.5° | 1542.6 | 1525.6 | 1532.5 | 1518.9 | 1518.6 |
| 25° | 1501.6 | 1483.3 | 1491.5 | 1475.6 | 1474.2 |
| 27.5° | 1452.8 | 1435.9 | 1442.7 | 1426.5 | 1424.9 |
| 30° | 1419.4 | 1402.4 | 1409.3 | 1391.9 | 1389.1 |
| 32.5° | 1381.3 | 1365.5 | 1371.2 | 1353.8 | 1352.2 |
| 35° | 1322.7 | 1307.2 | 1311.2 | 1293.8 | 1292.4 |
| 37.5° | 1256.1 | 1242.0 | 1244.3 | 1225.2 | 1223.8 |
| 40° | 1208.8 | 1194.7 | 1195.8 | 1175.6 | 1174.2 |
| 42.5° | 1156.8 | 1142.7 | 1141.6 | 1121.3 | 1119.9 |
| 45° | 1070.3 | 1056.2 | 1051.5 | 1032.7 | 1029.9 |
| 47.5° | 971.6 | 957.5 | 948.8 | 933.5 | 931.5 |
| 50° | 900.1 | 886.0 | 878.5 | 865.4 | 861.1 |
| 52.5° | 822.8 | 808.7 | 802.3 | 790.4 | 786.1 |
| 55° | 701.0 | 689.7 | 685.2 | 673.6 | 670.7 |
| 57.5° | 585.3 | 577.7 | 576.4 | 565.1 | 564.0 |
| 60° | 515.0 | 510.7 | 510.6 | 500.5 | 500.5 |
| 62.5° | 454.9 | 451.8 | 454.1 | 447.4 | 446.3 |
| 65° | 376.5 | 373.7 | 377.9 | 375.0 | 375.0 |
| 67.5° | 314.5 | 314.5 | 317.1 | 315.9 | 315.9 |
| 70° | 279.8 | 279.8 | 281.3 | 281.3 | 281.3 |
| 72.5° | 248.7 | 247.6 | 251.3 | 251.2 | 250.1 |
| 75° | 203.4 | 203.4 | 203.4 | 204.8 | 204.8 |
| 77.5° | 158.4 | 158.7 | 159.8 | 159.5 | 158.4 |
| 80° | 128.4 | 129.8 | 129.8 | 128.4 | 128.4 |
| 82.5° | 98.4 | 99.8 | 99.8 | 99.5 | 98.4 |
| 85° | 51.9 | 54.7 | 57.7 | 57.7 | 57.7 |
| 87.5° | 15.3 | 20.2 | 24.4 | 24.6 | 23.6 |
| 90° | 1.7 | 3.4 | 6.8 | 7.7 | 8.5 |
| 92.5° | 15.4 | 63.9 | 114.2 | 41.7 | 32.5 |
| 95° | 36.8 | 135.4 | 454.0 | 186.6 | 121.4 |
| 97.5° | 60.9 | 151.7 | 672.5 | 517.8 | 375.0 |
| 100° | 78.7 | 161.4 | 753.2 | 758.6 | 616.4 |
| 102.5° | 95.8 | 172.5 | 769.0 | 937.3 | 802.5 |
| 105° | 123.1 | 190.0 | 760.1 | 1160.4 | 1092.7 |
| 107.5° | 152.2 | 211.7 | 717.7 | 1268.0 | 1292.7 |
| 110° | 172.7 | 226.2 | 684.8 | 1291.1 | 1371.4 |

TEST NUMBER: P564326

CATALOG NUMBER: SQ4-PR1-100U-125D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 191.2 | 242.7 | 654.1 | 1272.9 | 1391.2 |
| 115° | 220.6 | 266.6 | 612.2 | 1211.9 | 1378.2 |
| 117.5° | 246.2 | 292.0 | 584.6 | 1126.0 | 1315.3 |
| 120° | 263.3 | 308.5 | 573.7 | 1067.9 | 1258.5 |
| 122.5° | 279.8 | 322.9 | 564.8 | 1013.7 | 1194.2 |
| 125° | 302.7 | 344.5 | 554.9 | 939.1 | 1102.1 |
| 127.5° | 322.2 | 364.0 | 549.1 | 876.0 | 1016.6 |
| 130° | 335.2 | 377.0 | 546.3 | 837.4 | 965.3 |
| 132.5° | 347.5 | 387.3 | 543.6 | 805.0 | 920.8 |
| 135° | 364.2 | 403.5 | 539.5 | 760.6 | 857.6 |
| 137.5° | 383.0 | 418.8 | 537.4 | 723.3 | 806.1 |
| 140° | 393.3 | 428.4 | 536.1 | 698.5 | 771.2 |
| 142.5° | 404.9 | 437.4 | 534.7 | 676.4 | 740.4 |
| 145° | 422.4 | 451.6 | 532.7 | 647.5 | 696.8 |
| 147.5° | 439.1 | 464.7 | 530.8 | 623.1 | 661.4 |
| 150° | 451.4 | 472.3 | 530.1 | 608.6 | 639.5 |
| 152.5° | 461.0 | 480.6 | 529.4 | 596.2 | 621.7 |
| 155° | 476.2 | 492.1 | 528.4 | 581.0 | 599.3 |
| 157.5° | 490.2 | 502.5 | 528.6 | 569.9 | 582.4 |
| 160° | 498.5 | 509.3 | 529.2 | 563.6 | 572.8 |
| 162.5° | 505.3 | 514.8 | 529.9 | 558.1 | 565.3 |
| 165° | 515.6 | 522.2 | 530.9 | 551.6 | 555.7 |
| 167.5° | 523.4 | 527.4 | 531.8 | 547.6 | 548.9 |
| 170° | 527.5 | 530.9 | 531.8 | 545.5 | 545.5 |
| 172.5° | 530.9 | 533.0 | 531.8 | 542.7 | 542.1 |
| 175° | 534.4 | 535.2 | 531.8 | 539.5 | 537.8 |
| 177.5° | 535.7 | 535.1 | 531.6 | 536.4 | 535.0 |
| 180° | 534.4 | 534.4 | 534.4 | 534.4 | 534.4 |

(END OF REPORT)