

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: P561911

Luminaire Tested: **SQ4-PR1-075U-100D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P561911
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, 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-PR1-075U-100D-92765-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

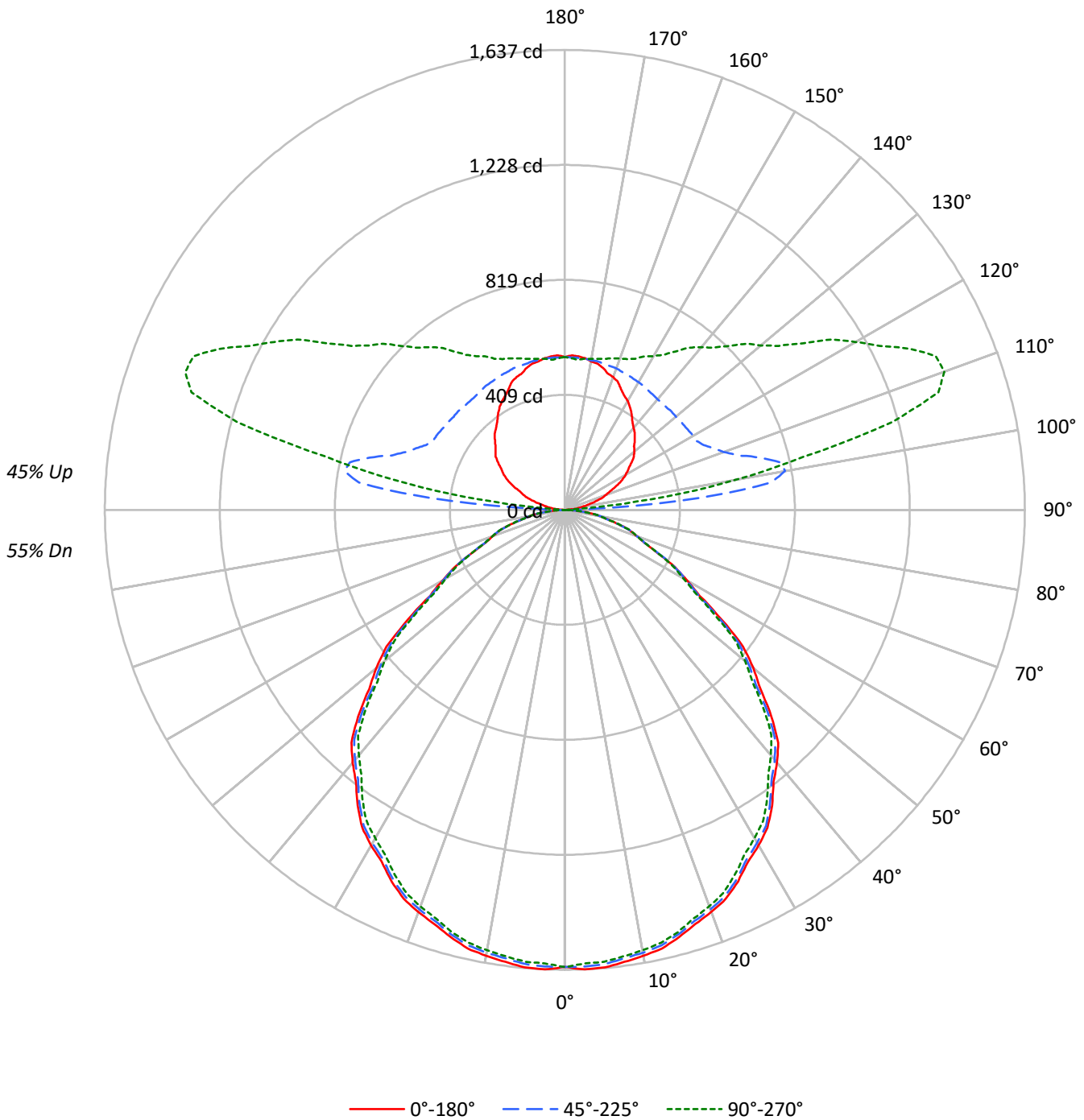
Lumens per Lamp: N/A
Luminaire Lumens: 7448.1 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 66
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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CATALOG NUMBER: SQ4-PR1-075U-100D-92765-1D-UNV-STD-W-4 (4500K)

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 | 59 | 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° | 15011 | 15011 | 15011 |
| 5° | 15146 | 15029 | 14952 |
| 10° | 15098 | 14993 | 14915 |
| 15° | 15031 | 14938 | 14858 |
| 20° | 14956 | 14860 | 14750 |
| 25° | 14851 | 14751 | 14580 |
| 30° | 14691 | 14586 | 14377 |
| 35° | 14474 | 14347 | 14142 |
| 40° | 14144 | 13991 | 13739 |
| 45° | 13567 | 13330 | 13056 |
| 50° | 12552 | 12249 | 12008 |
| 55° | 10956 | 10708 | 10481 |
| 60° | 9232 | 9154 | 8973 |
| 65° | 7986 | 8016 | 7955 |
| 70° | 7335 | 7372 | 7372 |
| 75° | 7044 | 7044 | 7094 |
| 80° | 6626 | 6700 | 6626 |
| 85° | 5335 | 5939 | 5939 |



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CATALOG NUMBER: SQ4-PR1-075U-100D-92765-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 153.9 | 2.1 |
| 10°-20° | 440.2 | 5.9 |
| 20°-30° | 664.0 | 8.9 |
| 30°-40° | 791.1 | 10.6 |
| 40°-50° | 780.0 | 10.5 |
| 50°-60° | 596.1 | 8.0 |
| 60°-70° | 368.9 | 5.0 |
| 70°-80° | 209.5 | 2.8 |
| 80°-90° | 63.7 | 0.9 |
| 90°-100° | 248.0 | 3.3 |
| 100°-110° | 705.7 | 9.5 |
| 110°-120° | 676.1 | 9.1 |
| 120°-130° | 535.1 | 7.2 |
| 130°-140° | 429.5 | 5.8 |
| 140°-150° | 336.2 | 4.5 |
| 150°-160° | 246.0 | 3.3 |
| 160°-170° | 152.4 | 2.0 |
| 170°-180° | 51.7 | 0.7 |
| 0°-30° | 1258.0 | 16.9 |
| 0°-40° | 2049.1 | 27.5 |
| 0°-60° | 3425.2 | 46.0 |
| 0°-90° | 4067.3 | 54.6 |
| 90°-120° | 1629.8 | 21.9 |
| 90°-150° | 2930.6 | 39.3 |
| 90°-180° | 3381.0 | 45.4 |
| 0°-180° | 7448.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1627 | 1627 | 1627 | 1627 | 1627 | |
| 5° | 1635 | 1618 | 1623 | 1617 | 1614 | 155 |
| 15° | 1574 | 1557 | 1564 | 1558 | 1556 | 444 |
| 25° | 1459 | 1441 | 1449 | 1434 | 1432 | 671 |
| 35° | 1285 | 1270 | 1274 | 1257 | 1256 | 802 |
| 45° | 1040 | 1026 | 1022 | 1003 | 1001 | 797 |
| 55° | 681 | 670 | 666 | 654 | 652 | 610 |
| 65° | 366 | 363 | 367 | 364 | 364 | 371 |
| 75° | 198 | 198 | 198 | 199 | 199 | 209 |
| 85° | 50 | 53 | 56 | 56 | 56 | 59 |
| 90° | 0 | 0 | 0 | 0 | 0 | 3 |
| 95° | 27 | 107 | 480 | 166 | 102 | 31 |
| 105° | 110 | 166 | 719 | 1270 | 1208 | 116 |
| 115° | 204 | 246 | 545 | 1155 | 1356 | 201 |
| 125° | 288 | 319 | 520 | 864 | 1033 | 257 |
| 135° | 352 | 381 | 514 | 730 | 825 | 271 |
| 145° | 415 | 436 | 518 | 631 | 688 | 259 |
| 155° | 474 | 485 | 531 | 571 | 594 | 219 |
| 165° | 524 | 526 | 537 | 549 | 557 | 147 |
| 175° | 548 | 545 | 543 | 540 | 536 | 52 |
| 180° | 544 | 544 | 544 | 544 | 544 | |

TEST NUMBER: P561911

CATALOG NUMBER: SQ4-PR1-075U-100D-92765-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1627.0 | 1627.0 | 1627.0 | 1627.0 | 1627.0 |
| 2.5° | 1637.1 | 1622.8 | 1627.0 | 1623.5 | 1615.8 |
| 5° | 1635.4 | 1617.6 | 1622.8 | 1617.1 | 1614.4 |
| 7.5° | 1622.8 | 1605.3 | 1610.5 | 1604.8 | 1603.2 |
| 10° | 1611.6 | 1595.1 | 1600.4 | 1594.7 | 1592.0 |
| 12.5° | 1599.2 | 1581.7 | 1588.0 | 1581.2 | 1578.5 |
| 15° | 1573.7 | 1557.3 | 1563.9 | 1558.3 | 1555.5 |
| 17.5° | 1545.7 | 1528.2 | 1534.8 | 1528.3 | 1524.7 |
| 20° | 1523.3 | 1506.9 | 1513.5 | 1503.6 | 1502.3 |
| 22.5° | 1498.6 | 1482.2 | 1488.8 | 1475.6 | 1475.4 |
| 25° | 1458.8 | 1441.0 | 1449.0 | 1433.6 | 1432.2 |
| 27.5° | 1411.5 | 1395.0 | 1401.7 | 1385.9 | 1384.3 |
| 30° | 1379.0 | 1362.5 | 1369.1 | 1352.3 | 1349.5 |
| 32.5° | 1342.0 | 1326.6 | 1332.1 | 1315.3 | 1313.6 |
| 35° | 1285.1 | 1270.0 | 1273.8 | 1257.0 | 1255.6 |
| 37.5° | 1220.3 | 1206.6 | 1208.8 | 1190.3 | 1188.9 |
| 40° | 1174.4 | 1160.6 | 1161.7 | 1142.1 | 1140.7 |
| 42.5° | 1123.9 | 1110.2 | 1109.0 | 1089.4 | 1088.0 |
| 45° | 1039.8 | 1026.1 | 1021.6 | 1003.3 | 1000.6 |
| 47.5° | 944.0 | 930.3 | 921.8 | 906.9 | 905.0 |
| 50° | 874.5 | 860.8 | 853.4 | 840.7 | 836.6 |
| 52.5° | 799.3 | 785.6 | 779.4 | 767.9 | 763.7 |
| 55° | 681.1 | 670.1 | 665.7 | 654.4 | 651.6 |
| 57.5° | 568.7 | 561.3 | 560.0 | 549.0 | 547.9 |
| 60° | 500.3 | 496.2 | 496.1 | 486.3 | 486.3 |
| 62.5° | 442.0 | 439.0 | 441.2 | 434.7 | 433.6 |
| 65° | 365.8 | 363.0 | 367.2 | 364.4 | 364.4 |
| 67.5° | 305.5 | 305.5 | 308.0 | 306.9 | 306.9 |
| 70° | 271.9 | 271.9 | 273.3 | 273.3 | 273.3 |
| 72.5° | 241.6 | 240.5 | 244.1 | 244.1 | 243.0 |
| 75° | 197.6 | 197.6 | 197.6 | 199.0 | 199.0 |
| 77.5° | 153.9 | 154.1 | 155.3 | 155.0 | 153.9 |
| 80° | 124.7 | 126.1 | 126.1 | 124.7 | 124.7 |
| 82.5° | 95.6 | 96.9 | 97.0 | 96.7 | 95.6 |
| 85° | 50.4 | 53.2 | 56.1 | 56.1 | 56.1 |
| 87.5° | 14.6 | 19.0 | 22.4 | 22.4 | 21.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 8.3 | 43.9 | 101.8 | 29.6 | 22.3 |
| 95° | 26.9 | 106.8 | 480.1 | 166.2 | 102.4 |
| 97.5° | 49.5 | 125.1 | 739.4 | 529.1 | 362.6 |
| 100° | 65.2 | 136.0 | 795.7 | 806.0 | 620.8 |
| 102.5° | 82.6 | 147.7 | 783.3 | 1031.7 | 870.0 |
| 105° | 109.7 | 166.3 | 719.1 | 1270.2 | 1207.5 |
| 107.5° | 137.2 | 188.0 | 644.2 | 1337.5 | 1393.4 |
| 110° | 156.2 | 203.8 | 601.2 | 1311.8 | 1437.2 |



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CATALOG NUMBER: SQ4-PR1-075U-100D-92765-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 174.5 | 219.6 | 572.2 | 1250.9 | 1429.8 |
| 115° | 203.8 | 246.3 | 545.3 | 1155.2 | 1356.5 |
| 117.5° | 229.7 | 269.6 | 529.4 | 1050.5 | 1263.8 |
| 120° | 250.4 | 283.8 | 527.7 | 990.7 | 1195.1 |
| 122.5° | 267.0 | 300.3 | 523.6 | 938.3 | 1128.1 |
| 125° | 287.7 | 319.0 | 520.5 | 863.7 | 1032.7 |
| 127.5° | 310.2 | 339.5 | 518.8 | 819.1 | 958.4 |
| 130° | 321.8 | 351.1 | 516.3 | 788.1 | 909.5 |
| 132.5° | 334.2 | 362.7 | 516.3 | 763.9 | 875.6 |
| 135° | 351.8 | 381.1 | 514.3 | 729.6 | 824.7 |
| 137.5° | 368.4 | 396.9 | 514.0 | 700.5 | 782.7 |
| 140° | 380.8 | 410.1 | 513.2 | 676.4 | 755.3 |
| 142.5° | 394.8 | 419.3 | 515.7 | 657.2 | 728.0 |
| 145° | 414.9 | 436.2 | 518.4 | 631.4 | 688.1 |
| 147.5° | 432.1 | 452.7 | 522.9 | 605.4 | 654.4 |
| 150° | 447.0 | 461.2 | 524.6 | 596.8 | 631.2 |
| 152.5° | 458.6 | 473.6 | 526.3 | 585.1 | 617.1 |
| 155° | 473.9 | 485.0 | 530.8 | 570.7 | 593.9 |
| 157.5° | 492.9 | 499.6 | 531.8 | 564.1 | 580.7 |
| 160° | 502.9 | 507.9 | 536.0 | 559.1 | 573.2 |
| 162.5° | 508.7 | 514.5 | 536.8 | 554.9 | 565.8 |
| 165° | 523.6 | 525.6 | 537.0 | 548.6 | 556.7 |
| 167.5° | 533.7 | 531.9 | 541.8 | 547.0 | 550.3 |
| 170° | 537.0 | 536.0 | 540.1 | 541.3 | 545.3 |
| 172.5° | 544.5 | 541.0 | 542.6 | 539.6 | 542.8 |
| 175° | 548.4 | 545.4 | 543.2 | 540.0 | 536.0 |
| 177.5° | 550.1 | 545.2 | 542.6 | 539.3 | 540.1 |
| 180° | 544.3 | 544.3 | 544.3 | 544.3 | 544.3 |

(END OF REPORT)