

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: P564569

Luminaire Tested: **SQ4-PW1-025U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564569
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-PW1-025U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13429.3 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

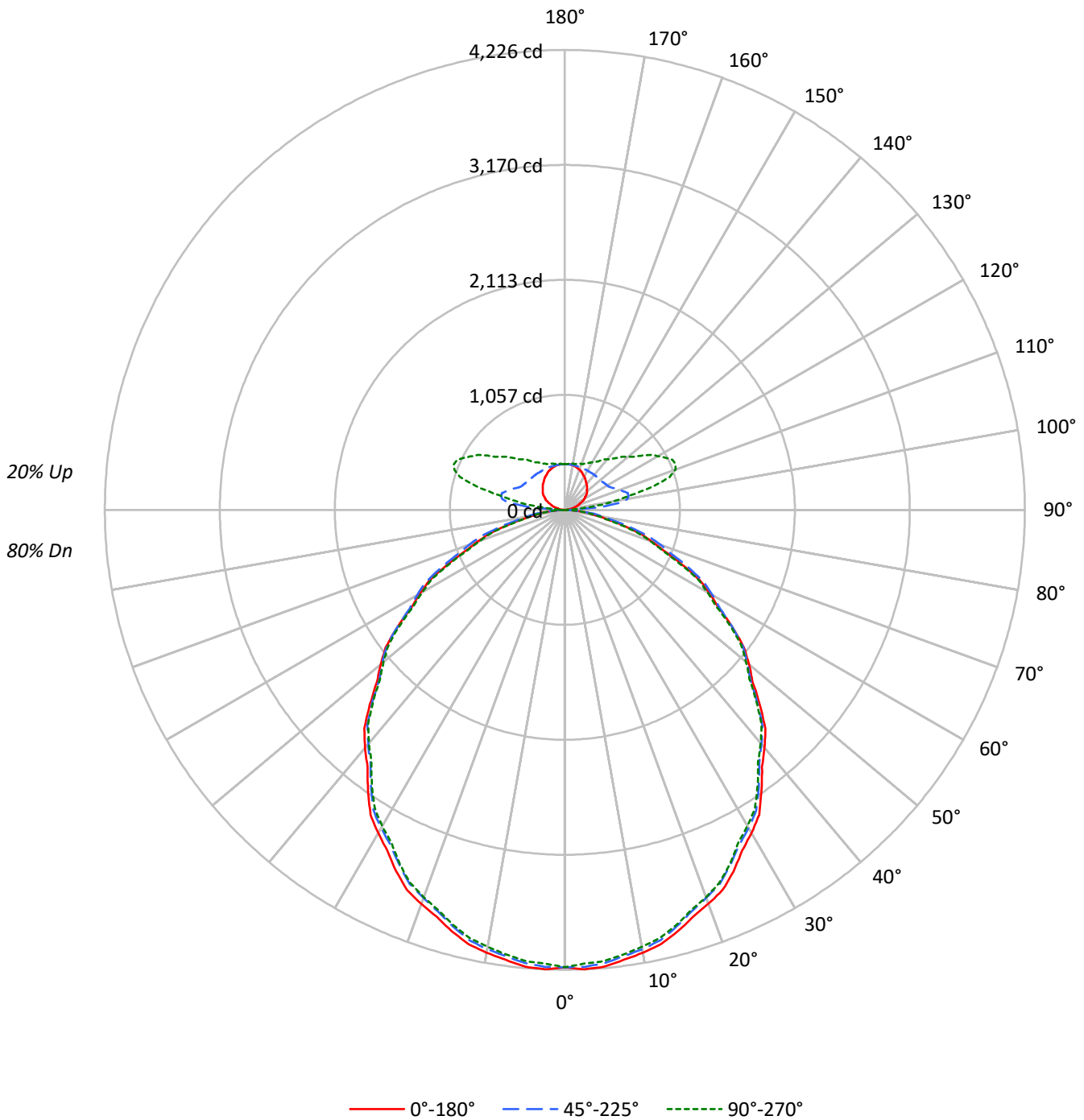
Input Watts (W): 123.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P564569

CATALOG NUMBER: SQ4-PW1-025U-100D-830-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P564569

CATALOG NUMBER: SQ4-PW1-025U-100D-830-1D-UNV-STD-W-12

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 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 114 | 114 | 114 | 114 | 109 | 109 | 109 | 109 | 100 | 100 | 100 | 91 | 91 | 91 | 83 | 83 | 83 | 80 | | | | | | | | |
| 1 | 105 | 100 | 96 | 93 | 100 | 96 | 92 | 89 | 88 | 85 | 83 | 81 | 79 | 77 | 74 | 72 | 71 | 67 | | | | | | | | |
| 2 | 95 | 88 | 81 | 76 | 91 | 84 | 78 | 73 | 77 | 73 | 69 | 71 | 67 | 64 | 65 | 62 | 60 | 57 | | | | | | | | |
| 3 | 87 | 77 | 70 | 63 | 83 | 74 | 67 | 62 | 68 | 63 | 58 | 63 | 58 | 54 | 58 | 54 | 51 | 48 | | | | | | | | |
| 4 | 80 | 69 | 60 | 54 | 76 | 66 | 58 | 52 | 61 | 55 | 50 | 56 | 51 | 47 | 52 | 48 | 44 | 41 | | | | | | | | |
| 5 | 73 | 61 | 53 | 46 | 70 | 59 | 51 | 45 | 55 | 48 | 43 | 51 | 45 | 41 | 47 | 42 | 38 | 36 | | | | | | | | |
| 6 | 68 | 55 | 47 | 41 | 65 | 53 | 45 | 40 | 49 | 43 | 38 | 46 | 40 | 36 | 42 | 38 | 34 | 32 | | | | | | | | |
| 7 | 63 | 50 | 42 | 36 | 60 | 48 | 40 | 35 | 45 | 38 | 33 | 42 | 36 | 32 | 39 | 34 | 30 | 28 | | | | | | | | |
| 8 | 58 | 46 | 37 | 32 | 56 | 44 | 36 | 31 | 41 | 35 | 30 | 38 | 33 | 28 | 36 | 31 | 27 | 25 | | | | | | | | |
| 9 | 55 | 42 | 34 | 29 | 52 | 40 | 33 | 28 | 38 | 31 | 27 | 35 | 30 | 26 | 33 | 28 | 25 | 23 | | | | | | | | |
| 10 | 51 | 39 | 31 | 26 | 49 | 37 | 30 | 25 | 35 | 29 | 24 | 33 | 27 | 23 | 31 | 26 | 22 | 21 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12924 | 12924 | 12924 |
| 5° | 13007 | 12905 | 12847 |
| 10° | 12904 | 12800 | 12730 |
| 15° | 12767 | 12625 | 12578 |
| 20° | 12614 | 12421 | 12396 |
| 25° | 12438 | 12212 | 12174 |
| 30° | 12175 | 11991 | 11912 |
| 35° | 11829 | 11663 | 11593 |
| 40° | 11460 | 11282 | 11237 |
| 45° | 11015 | 10870 | 10821 |
| 50° | 10558 | 10469 | 10399 |
| 55° | 10065 | 10065 | 9906 |
| 60° | 9451 | 9633 | 9291 |
| 65° | 8649 | 9080 | 8433 |
| 70° | 7624 | 8356 | 7425 |
| 75° | 6512 | 7479 | 6336 |
| 80° | 5049 | 6294 | 5115 |
| 85° | 3268 | 4834 | 4312 |



TEST NUMBER: P564569

CATALOG NUMBER: SQ4-PW1-025U-100D-830-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 395.7 | 2.9 |
| 10°-20° | 1117.2 | 8.3 |
| 20°-30° | 1657.2 | 12.3 |
| 30°-40° | 1939.1 | 14.4 |
| 40°-50° | 1930.4 | 14.4 |
| 50°-60° | 1667.0 | 12.4 |
| 60°-70° | 1199.9 | 8.9 |
| 70°-80° | 629.3 | 4.7 |
| 80°-90° | 158.3 | 1.2 |
| 90°-100° | 205.7 | 1.5 |
| 100°-110° | 540.7 | 4.0 |
| 110°-120° | 560.7 | 4.2 |
| 120°-130° | 449.7 | 3.3 |
| 130°-140° | 352.9 | 2.6 |
| 140°-150° | 270.8 | 2.0 |
| 150°-160° | 195.1 | 1.5 |
| 160°-170° | 119.3 | 0.9 |
| 170°-180° | 40.3 | 0.3 |
| 0°-30° | 3170.1 | 23.6 |
| 0°-40° | 5109.2 | 38.0 |
| 0°-60° | 8706.7 | 64.8 |
| 0°-90° | 10694.1 | 79.6 |
| 90°-120° | 1307.0 | 9.7 |
| 90°-150° | 2380.4 | 17.7 |
| 90°-180° | 2735.0 | 20.4 |
| 0°-180° | 13429.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4202 | 4202 | 4202 | 4202 | 4202 | |
| 5° | 4213 | 4166 | 4180 | 4169 | 4162 | 399 |
| 15° | 4010 | 3959 | 3965 | 3958 | 3951 | 1130 |
| 25° | 3666 | 3604 | 3599 | 3577 | 3588 | 1685 |
| 35° | 3151 | 3107 | 3106 | 3077 | 3088 | 1970 |
| 45° | 2532 | 2511 | 2499 | 2492 | 2488 | 1954 |
| 55° | 1877 | 1874 | 1877 | 1851 | 1848 | 1675 |
| 65° | 1188 | 1225 | 1248 | 1199 | 1159 | 1178 |
| 75° | 548 | 599 | 629 | 588 | 533 | 587 |
| 85° | 93 | 122 | 137 | 129 | 122 | 122 |
| 90° | 3 | 8 | 22 | 11 | 11 | 6 |
| 95° | 27 | 106 | 354 | 183 | 124 | 30 |
| 105° | 97 | 148 | 598 | 908 | 847 | 103 |
| 115° | 173 | 210 | 479 | 955 | 1090 | 171 |
| 125° | 241 | 270 | 436 | 736 | 868 | 214 |
| 135° | 287 | 316 | 422 | 594 | 674 | 222 |
| 145° | 333 | 354 | 417 | 507 | 546 | 208 |
| 155° | 376 | 387 | 417 | 458 | 471 | 173 |
| 165° | 406 | 411 | 417 | 433 | 438 | 115 |
| 175° | 422 | 422 | 419 | 425 | 425 | 40 |
| 180° | 422 | 422 | 422 | 422 | 422 | |

TEST NUMBER: P564569

CATALOG NUMBER: SQ4-PW1-025U-100D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4202.3 | 4202.3 | 4202.3 | 4202.3 | 4202.3 |
| 2.5° | 4226.0 | 4191.3 | 4202.3 | 4193.0 | 4172.7 |
| 5° | 4213.4 | 4166.4 | 4180.1 | 4168.8 | 4161.6 |
| 7.5° | 4170.5 | 4127.0 | 4137.2 | 4125.2 | 4120.9 |
| 10° | 4132.0 | 4088.5 | 4098.7 | 4083.7 | 4076.4 |
| 12.5° | 4087.6 | 4041.2 | 4051.3 | 4036.4 | 4032.0 |
| 15° | 4009.8 | 3959.1 | 3965.4 | 3957.8 | 3950.6 |
| 17.5° | 3919.5 | 3868.1 | 3869.1 | 3857.2 | 3855.8 |
| 20° | 3854.3 | 3800.0 | 3795.1 | 3780.4 | 3787.7 |
| 22.5° | 3783.2 | 3726.0 | 3721.0 | 3700.5 | 3710.6 |
| 25° | 3665.5 | 3603.9 | 3598.8 | 3576.9 | 3587.7 |
| 27.5° | 3529.2 | 3468.4 | 3468.5 | 3437.7 | 3449.2 |
| 30° | 3428.5 | 3370.6 | 3376.7 | 3340.0 | 3354.5 |
| 32.5° | 3321.9 | 3269.7 | 3273.0 | 3236.3 | 3250.8 |
| 35° | 3150.8 | 3107.4 | 3106.4 | 3077.0 | 3087.9 |
| 37.5° | 2976.1 | 2937.7 | 2931.6 | 2914.7 | 2917.6 |
| 40° | 2854.6 | 2822.0 | 2810.2 | 2799.1 | 2799.1 |
| 42.5° | 2727.3 | 2697.6 | 2685.8 | 2677.6 | 2674.7 |
| 45° | 2532.5 | 2510.8 | 2499.2 | 2491.7 | 2488.1 |
| 47.5° | 2340.0 | 2319.7 | 2309.6 | 2304.3 | 2300.7 |
| 50° | 2206.7 | 2192.2 | 2188.2 | 2177.0 | 2173.4 |
| 52.5° | 2073.4 | 2064.7 | 2060.8 | 2046.7 | 2043.0 |
| 55° | 1877.2 | 1873.5 | 1877.2 | 1851.2 | 1847.5 |
| 57.5° | 1672.8 | 1678.6 | 1690.6 | 1655.6 | 1646.9 |
| 60° | 1536.5 | 1551.0 | 1566.2 | 1525.1 | 1510.6 |
| 62.5° | 1397.3 | 1420.5 | 1441.8 | 1394.6 | 1374.4 |
| 65° | 1188.5 | 1224.7 | 1247.7 | 1198.7 | 1158.9 |
| 67.5° | 987.1 | 1032.0 | 1059.7 | 1006.8 | 961.9 |
| 70° | 847.9 | 898.6 | 929.3 | 876.3 | 825.7 |
| 72.5° | 726.4 | 782.9 | 807.9 | 757.9 | 707.2 |
| 75° | 548.0 | 598.7 | 629.4 | 587.5 | 533.2 |
| 77.5° | 388.8 | 436.5 | 462.1 | 425.5 | 380.6 |
| 80° | 285.1 | 335.8 | 355.4 | 325.0 | 288.8 |
| 82.5° | 202.2 | 244.2 | 257.7 | 239.4 | 214.7 |
| 85° | 92.6 | 121.5 | 137.0 | 129.4 | 122.2 |
| 87.5° | 24.2 | 45.6 | 60.6 | 58.5 | 61.4 |
| 90° | 2.7 | 8.0 | 21.6 | 10.8 | 10.8 |
| 92.5° | 11.4 | 54.7 | 121.2 | 53.7 | 34.6 |
| 95° | 27.1 | 106.4 | 354.4 | 182.6 | 124.4 |
| 97.5° | 47.1 | 116.9 | 530.2 | 421.6 | 310.5 |
| 100° | 62.2 | 125.7 | 584.3 | 592.1 | 459.9 |
| 102.5° | 75.2 | 134.4 | 599.4 | 737.5 | 624.3 |
| 105° | 97.4 | 147.6 | 597.8 | 907.5 | 846.7 |
| 107.5° | 120.1 | 166.7 | 563.7 | 995.8 | 1010.6 |
| 110° | 135.3 | 177.6 | 535.6 | 1018.5 | 1082.0 |

TEST NUMBER: P564569

CATALOG NUMBER: SQ4-PW1-025U-100D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 150.4 | 190.6 | 509.6 | 1004.2 | 1101.5 |
| 115° | 173.1 | 210.2 | 478.8 | 955.2 | 1090.1 |
| 117.5° | 195.3 | 229.2 | 457.7 | 887.4 | 1037.1 |
| 120° | 208.3 | 240.0 | 449.0 | 841.9 | 987.3 |
| 122.5° | 221.3 | 253.0 | 442.5 | 796.4 | 939.7 |
| 125° | 240.8 | 269.8 | 435.5 | 736.1 | 868.3 |
| 127.5° | 256.4 | 286.1 | 429.6 | 687.5 | 799.1 |
| 130° | 265.1 | 296.8 | 427.4 | 657.0 | 760.1 |
| 132.5° | 273.8 | 305.5 | 425.2 | 630.8 | 723.3 |
| 135° | 286.7 | 315.8 | 422.0 | 594.2 | 673.6 |
| 137.5° | 300.3 | 328.8 | 421.4 | 566.8 | 631.9 |
| 140° | 311.1 | 337.5 | 419.3 | 545.1 | 605.9 |
| 142.5° | 319.7 | 344.1 | 419.3 | 529.8 | 582.1 |
| 145° | 332.7 | 353.9 | 416.6 | 506.7 | 546.4 |
| 147.5° | 345.7 | 366.3 | 416.6 | 487.7 | 520.5 |
| 150° | 354.4 | 372.9 | 416.6 | 476.7 | 503.1 |
| 152.5° | 363.0 | 377.3 | 416.6 | 467.9 | 488.0 |
| 155° | 376.0 | 386.6 | 416.6 | 457.5 | 470.7 |
| 157.5° | 385.7 | 395.8 | 416.6 | 448.2 | 457.7 |
| 160° | 392.2 | 400.2 | 416.6 | 443.8 | 449.0 |
| 162.5° | 398.7 | 404.5 | 416.6 | 439.4 | 444.7 |
| 165° | 405.8 | 411.0 | 416.6 | 432.9 | 438.2 |
| 167.5° | 412.3 | 414.9 | 419.3 | 430.2 | 432.3 |
| 170° | 416.6 | 419.2 | 419.3 | 430.1 | 430.1 |
| 172.5° | 418.7 | 419.3 | 419.3 | 427.9 | 425.8 |
| 175° | 422.0 | 422.0 | 419.3 | 424.7 | 424.7 |
| 177.5° | 422.0 | 422.0 | 419.8 | 424.1 | 422.0 |
| 180° | 422.0 | 422.0 | 422.0 | 422.0 | 422.0 |

(END OF REPORT)