

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: P564581

Luminaire Tested: **SQ4-PW1-025U-100D-930-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564581
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-930-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

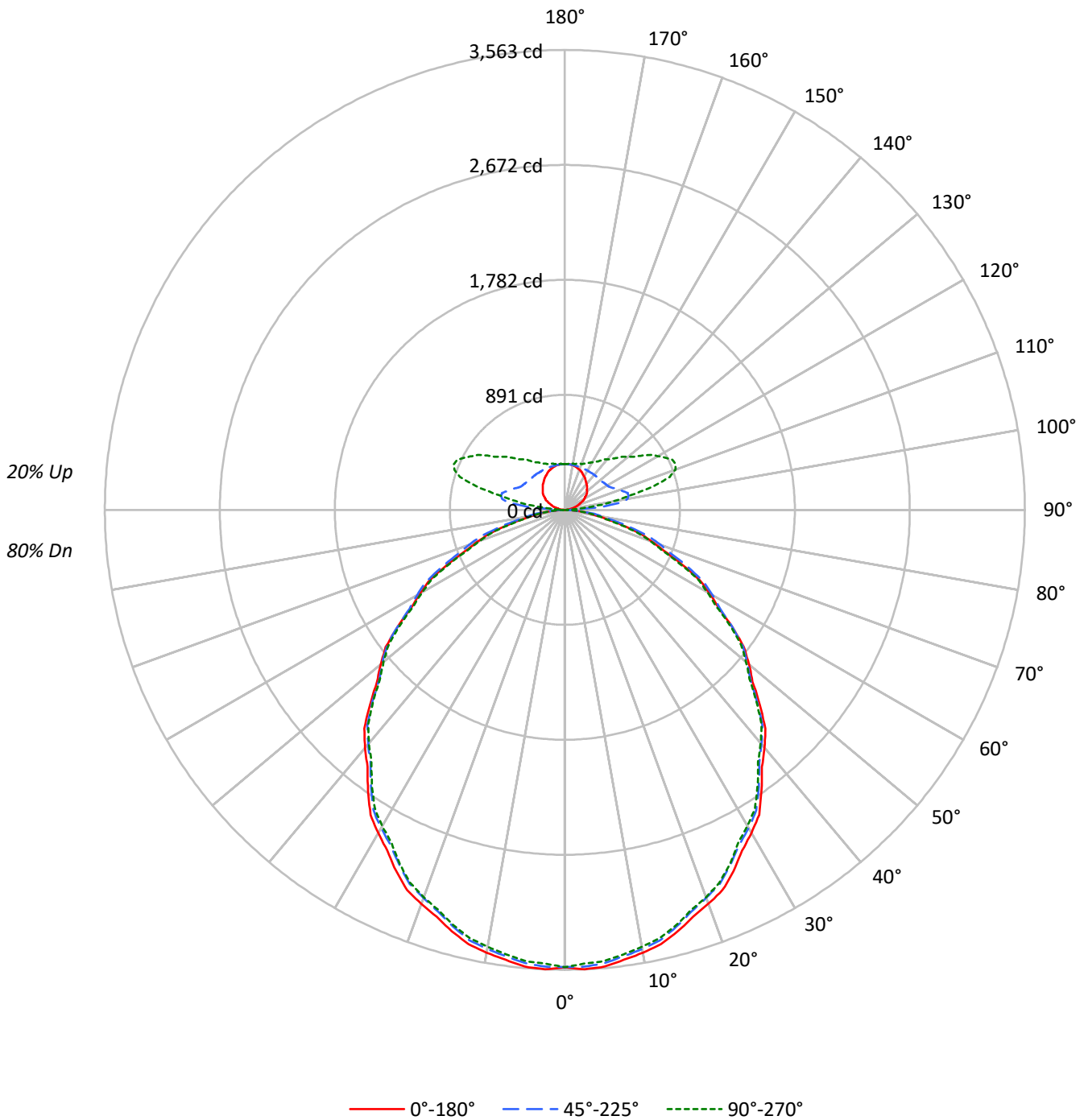
Lumens per Lamp: N/A
Luminaire Lumens: 11321.7 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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



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Luminous Intensity Polar Plot





TEST NUMBER: P564581

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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 | 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° | 10896 | 10896 | 10896 |
| 5° | 10966 | 10879 | 10831 |
| 10° | 10878 | 10791 | 10732 |
| 15° | 10763 | 10644 | 10604 |
| 20° | 10635 | 10471 | 10451 |
| 25° | 10486 | 10295 | 10263 |
| 30° | 10264 | 10109 | 10043 |
| 35° | 9973 | 9832 | 9774 |
| 40° | 9662 | 9512 | 9474 |
| 45° | 9286 | 9164 | 9123 |
| 50° | 8901 | 8826 | 8767 |
| 55° | 8486 | 8486 | 8352 |
| 60° | 7968 | 8122 | 7833 |
| 65° | 7292 | 7655 | 7110 |
| 70° | 6427 | 7045 | 6259 |
| 75° | 5490 | 6305 | 5341 |
| 80° | 4256 | 5308 | 4313 |
| 85° | 2752 | 4076 | 3634 |



TEST NUMBER: P564581

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 333.6 | 2.9 |
| 10°-20° | 941.9 | 8.3 |
| 20°-30° | 1397.1 | 12.3 |
| 30°-40° | 1634.8 | 14.4 |
| 40°-50° | 1627.5 | 14.4 |
| 50°-60° | 1405.4 | 12.4 |
| 60°-70° | 1011.6 | 8.9 |
| 70°-80° | 530.5 | 4.7 |
| 80°-90° | 133.4 | 1.2 |
| 90°-100° | 173.4 | 1.5 |
| 100°-110° | 455.8 | 4.0 |
| 110°-120° | 472.7 | 4.2 |
| 120°-130° | 379.1 | 3.3 |
| 130°-140° | 297.5 | 2.6 |
| 140°-150° | 228.3 | 2.0 |
| 150°-160° | 164.5 | 1.5 |
| 160°-170° | 100.6 | 0.9 |
| 170°-180° | 34.0 | 0.3 |
| 0°-30° | 2672.6 | 23.6 |
| 0°-40° | 4307.3 | 38.0 |
| 0°-60° | 7340.2 | 64.8 |
| 0°-90° | 9015.7 | 79.6 |
| 90°-120° | 1101.9 | 9.7 |
| 90°-150° | 2006.9 | 17.7 |
| 90°-180° | 2306.0 | 20.4 |
| 0°-180° | 11321.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3543 | 3543 | 3543 | 3543 | 3543 | |
| 5° | 3552 | 3512 | 3524 | 3515 | 3508 | 336 |
| 15° | 3380 | 3338 | 3343 | 3337 | 3330 | 953 |
| 25° | 3090 | 3038 | 3034 | 3016 | 3025 | 1421 |
| 35° | 2656 | 2620 | 2619 | 2594 | 2603 | 1661 |
| 45° | 2135 | 2117 | 2107 | 2101 | 2098 | 1647 |
| 55° | 1583 | 1580 | 1583 | 1561 | 1558 | 1412 |
| 65° | 1002 | 1032 | 1052 | 1011 | 977 | 993 |
| 75° | 462 | 505 | 531 | 495 | 450 | 495 |
| 85° | 78 | 102 | 116 | 109 | 103 | 103 |
| 90° | 2 | 7 | 18 | 9 | 9 | 5 |
| 95° | 23 | 90 | 299 | 154 | 105 | 25 |
| 105° | 82 | 124 | 504 | 765 | 714 | 87 |
| 115° | 146 | 177 | 404 | 805 | 919 | 144 |
| 125° | 203 | 228 | 367 | 621 | 732 | 180 |
| 135° | 242 | 266 | 356 | 501 | 568 | 187 |
| 145° | 280 | 298 | 351 | 427 | 461 | 176 |
| 155° | 317 | 326 | 351 | 386 | 397 | 146 |
| 165° | 342 | 346 | 351 | 365 | 369 | 97 |
| 175° | 356 | 356 | 354 | 358 | 358 | 34 |
| 180° | 356 | 356 | 356 | 356 | 356 | |

TEST NUMBER: P564581

CATALOG NUMBER: SQ4-PW1-025U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3542.8 | 3542.8 | 3542.8 | 3542.8 | 3542.8 |
| 2.5° | 3562.8 | 3533.5 | 3542.8 | 3534.9 | 3517.8 |
| 5° | 3552.2 | 3512.5 | 3524.1 | 3514.6 | 3508.5 |
| 7.5° | 3516.0 | 3479.3 | 3487.9 | 3477.8 | 3474.1 |
| 10° | 3483.5 | 3446.9 | 3455.4 | 3442.8 | 3436.7 |
| 12.5° | 3446.0 | 3407.0 | 3415.5 | 3402.9 | 3399.2 |
| 15° | 3380.5 | 3337.8 | 3343.0 | 3336.7 | 3330.5 |
| 17.5° | 3304.3 | 3261.0 | 3261.9 | 3251.9 | 3250.6 |
| 20° | 3249.4 | 3203.6 | 3199.4 | 3187.1 | 3193.2 |
| 22.5° | 3189.5 | 3141.2 | 3137.0 | 3119.7 | 3128.3 |
| 25° | 3090.2 | 3038.3 | 3034.0 | 3015.5 | 3024.6 |
| 27.5° | 2975.3 | 2924.1 | 2924.1 | 2898.1 | 2907.9 |
| 30° | 2890.4 | 2841.6 | 2846.7 | 2815.8 | 2828.0 |
| 32.5° | 2800.5 | 2756.6 | 2759.3 | 2728.4 | 2740.6 |
| 35° | 2656.3 | 2619.7 | 2618.9 | 2594.1 | 2603.3 |
| 37.5° | 2509.0 | 2476.6 | 2471.5 | 2457.2 | 2459.7 |
| 40° | 2406.6 | 2379.1 | 2369.2 | 2359.8 | 2359.8 |
| 42.5° | 2299.2 | 2274.2 | 2264.3 | 2257.4 | 2254.9 |
| 45° | 2135.0 | 2116.7 | 2107.0 | 2100.6 | 2097.6 |
| 47.5° | 1972.7 | 1955.6 | 1947.1 | 1942.7 | 1939.6 |
| 50° | 1860.4 | 1848.2 | 1844.8 | 1835.3 | 1832.3 |
| 52.5° | 1748.0 | 1740.7 | 1737.4 | 1725.4 | 1722.4 |
| 55° | 1582.6 | 1579.5 | 1582.6 | 1560.6 | 1557.6 |
| 57.5° | 1410.3 | 1415.1 | 1425.2 | 1395.7 | 1388.4 |
| 60° | 1295.4 | 1307.6 | 1320.4 | 1285.7 | 1273.5 |
| 62.5° | 1178.0 | 1197.6 | 1215.5 | 1175.8 | 1158.7 |
| 65° | 1002.0 | 1032.5 | 1051.9 | 1010.6 | 977.0 |
| 67.5° | 832.2 | 870.0 | 893.3 | 848.8 | 810.9 |
| 70° | 714.8 | 757.5 | 783.5 | 738.8 | 696.1 |
| 72.5° | 612.4 | 660.0 | 681.1 | 638.9 | 596.2 |
| 75° | 462.0 | 504.7 | 530.6 | 495.3 | 449.5 |
| 77.5° | 327.7 | 368.0 | 389.6 | 358.7 | 320.9 |
| 80° | 240.3 | 283.1 | 299.7 | 274.0 | 243.5 |
| 82.5° | 170.4 | 205.8 | 217.3 | 201.8 | 181.0 |
| 85° | 78.0 | 102.5 | 115.5 | 109.1 | 103.0 |
| 87.5° | 20.4 | 38.4 | 51.1 | 49.3 | 51.8 |
| 90° | 2.3 | 6.7 | 18.2 | 9.1 | 9.1 |
| 92.5° | 9.6 | 46.1 | 102.2 | 45.2 | 29.2 |
| 95° | 22.8 | 89.7 | 298.7 | 154.0 | 104.9 |
| 97.5° | 39.7 | 98.5 | 447.0 | 355.5 | 261.8 |
| 100° | 52.5 | 106.0 | 492.6 | 499.2 | 387.7 |
| 102.5° | 63.4 | 113.3 | 505.4 | 621.8 | 526.3 |
| 105° | 82.1 | 124.5 | 504.0 | 765.1 | 713.8 |
| 107.5° | 101.3 | 140.5 | 475.3 | 839.5 | 852.0 |
| 110° | 114.0 | 149.7 | 451.5 | 858.7 | 912.2 |

TEST NUMBER: P564581

CATALOG NUMBER: SQ4-PW1-025U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 126.8 | 160.7 | 429.7 | 846.6 | 928.6 |
| 115° | 146.0 | 177.2 | 403.7 | 805.3 | 919.1 |
| 117.5° | 164.7 | 193.2 | 385.9 | 748.1 | 874.4 |
| 120° | 175.6 | 202.4 | 378.6 | 709.7 | 832.4 |
| 122.5° | 186.5 | 213.3 | 373.1 | 671.4 | 792.3 |
| 125° | 203.0 | 227.5 | 367.2 | 620.6 | 732.0 |
| 127.5° | 216.2 | 241.2 | 362.1 | 579.6 | 673.7 |
| 130° | 223.5 | 250.2 | 360.3 | 553.9 | 640.8 |
| 132.5° | 230.8 | 257.5 | 358.5 | 531.8 | 609.8 |
| 135° | 241.7 | 266.3 | 355.8 | 501.0 | 567.9 |
| 137.5° | 253.1 | 277.2 | 355.3 | 477.9 | 532.7 |
| 140° | 262.3 | 284.6 | 353.5 | 459.6 | 510.8 |
| 142.5° | 269.6 | 290.1 | 353.5 | 446.6 | 490.8 |
| 145° | 280.5 | 298.3 | 351.2 | 427.2 | 460.7 |
| 147.5° | 291.5 | 308.8 | 351.2 | 411.1 | 438.8 |
| 150° | 298.7 | 314.4 | 351.2 | 401.9 | 424.2 |
| 152.5° | 306.0 | 318.1 | 351.2 | 394.5 | 411.4 |
| 155° | 317.0 | 325.9 | 351.2 | 385.7 | 396.8 |
| 157.5° | 325.2 | 333.7 | 351.2 | 377.8 | 385.9 |
| 160° | 330.7 | 337.4 | 351.2 | 374.1 | 378.6 |
| 162.5° | 336.1 | 341.1 | 351.2 | 370.5 | 374.9 |
| 165° | 342.1 | 346.5 | 351.2 | 365.0 | 369.4 |
| 167.5° | 347.6 | 349.8 | 353.5 | 362.6 | 364.4 |
| 170° | 351.2 | 353.4 | 353.5 | 362.6 | 362.6 |
| 172.5° | 353.0 | 353.5 | 353.5 | 360.7 | 359.0 |
| 175° | 355.8 | 355.8 | 353.5 | 358.0 | 358.0 |
| 177.5° | 355.8 | 355.8 | 353.9 | 357.5 | 355.8 |
| 180° | 355.8 | 355.8 | 355.8 | 355.8 | 355.8 |

(END OF REPORT)