

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: P564078

Luminaire Tested: **SQ4-PR1-075U-075D-930-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564078
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

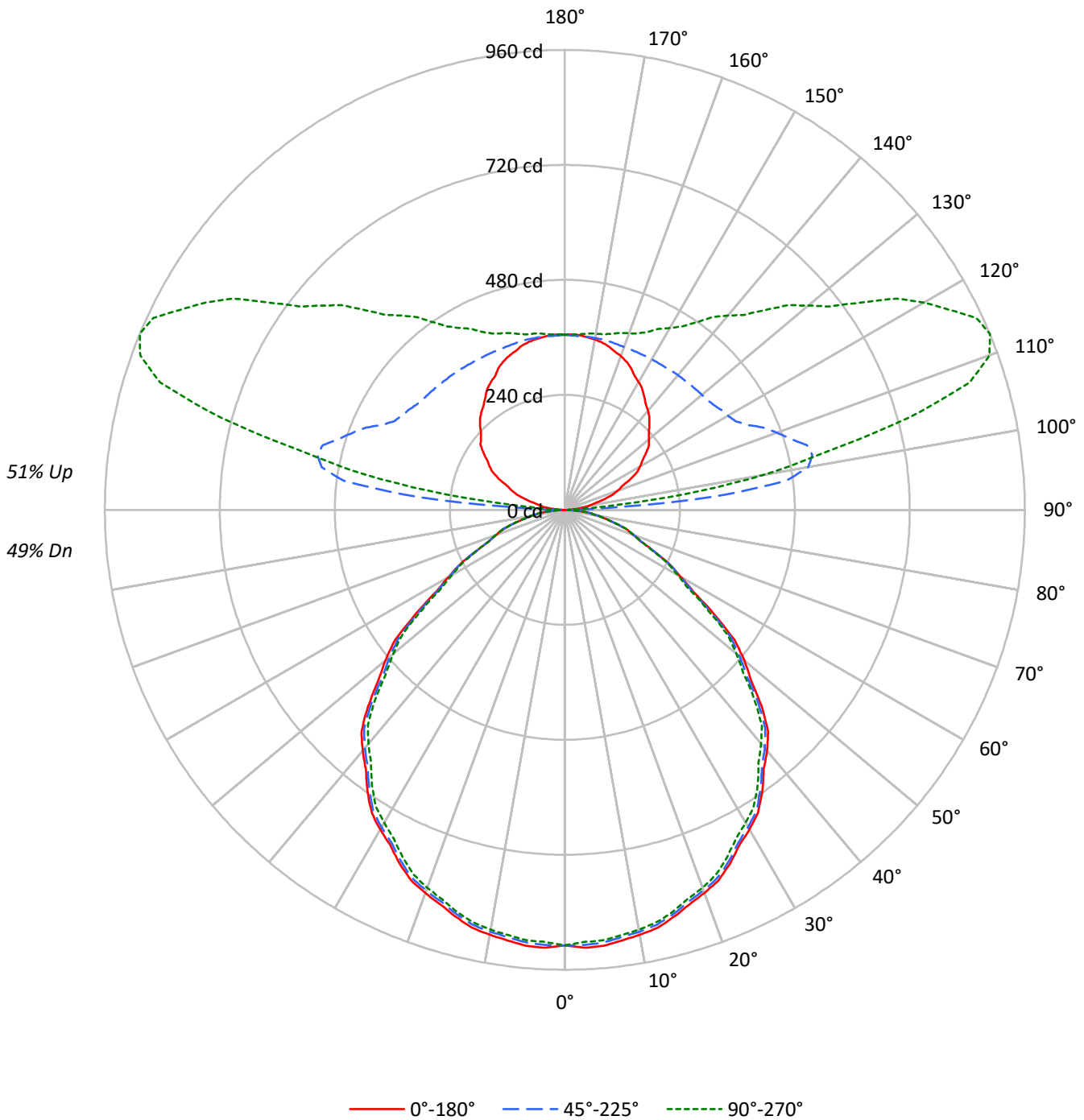
Lumens per Lamp: N/A
Luminaire Lumens: 4656.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.5
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: P564078

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 83 | 83 | 83 | 68 | 68 | 68 | 55 | 55 | 55 | 49 | | |
| 1 | 98 | 94 | 90 | 86 | 90 | 86 | 83 | 80 | 73 | 71 | 68 | 60 | 59 | 57 | 49 | 48 | 47 | 42 | | |
| 2 | 89 | 82 | 76 | 71 | 82 | 76 | 71 | 66 | 64 | 60 | 57 | 53 | 51 | 48 | 44 | 42 | 40 | 35 | | |
| 3 | 82 | 72 | 65 | 59 | 75 | 67 | 61 | 56 | 57 | 52 | 48 | 47 | 44 | 41 | 39 | 36 | 34 | 30 | | |
| 4 | 75 | 64 | 56 | 50 | 69 | 59 | 53 | 47 | 51 | 45 | 41 | 42 | 39 | 36 | 35 | 32 | 30 | 26 | | |
| 5 | 69 | 57 | 49 | 43 | 63 | 53 | 46 | 41 | 45 | 40 | 36 | 38 | 34 | 31 | 31 | 28 | 26 | 23 | | |
| 6 | 63 | 51 | 43 | 38 | 58 | 48 | 41 | 36 | 41 | 35 | 31 | 35 | 30 | 27 | 29 | 25 | 23 | 20 | | |
| 7 | 59 | 46 | 39 | 33 | 54 | 43 | 36 | 31 | 37 | 32 | 28 | 31 | 27 | 24 | 26 | 23 | 21 | 18 | | |
| 8 | 54 | 42 | 35 | 29 | 50 | 39 | 32 | 28 | 34 | 28 | 25 | 29 | 25 | 21 | 24 | 21 | 18 | 16 | | |
| 9 | 51 | 39 | 31 | 26 | 47 | 36 | 29 | 25 | 31 | 26 | 22 | 26 | 22 | 19 | 22 | 19 | 17 | 14 | | |
| 10 | 47 | 35 | 28 | 23 | 44 | 33 | 27 | 22 | 29 | 23 | 20 | 24 | 20 | 17 | 21 | 17 | 15 | 13 | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8388 | 8388 | 8388 |
| 5° | 8463 | 8398 | 8355 |
| 10° | 8436 | 8378 | 8334 |
| 15° | 8400 | 8347 | 8302 |
| 20° | 8357 | 8303 | 8242 |
| 25° | 8299 | 8243 | 8147 |
| 30° | 8209 | 8151 | 8034 |
| 35° | 8088 | 8017 | 7902 |
| 40° | 7903 | 7819 | 7677 |
| 45° | 7581 | 7449 | 7295 |
| 50° | 7013 | 6845 | 6710 |
| 55° | 6122 | 5984 | 5857 |
| 60° | 5159 | 5115 | 5014 |
| 65° | 4462 | 4480 | 4445 |
| 70° | 4098 | 4119 | 4119 |
| 75° | 3935 | 3935 | 3964 |
| 80° | 3703 | 3746 | 3703 |
| 85° | 2985 | 3313 | 3313 |



TEST NUMBER: P564078

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 86.0 | 1.8 |
| 10°-20° | 246.0 | 5.3 |
| 20°-30° | 371.0 | 8.0 |
| 30°-40° | 442.1 | 9.5 |
| 40°-50° | 435.8 | 9.4 |
| 50°-60° | 333.1 | 7.2 |
| 60°-70° | 206.1 | 4.4 |
| 70°-80° | 117.1 | 2.5 |
| 80°-90° | 36.5 | 0.8 |
| 90°-100° | 172.5 | 3.7 |
| 100°-110° | 474.5 | 10.2 |
| 110°-120° | 489.8 | 10.5 |
| 120°-130° | 392.4 | 8.4 |
| 130°-140° | 308.2 | 6.6 |
| 140°-150° | 236.2 | 5.1 |
| 150°-160° | 169.8 | 3.6 |
| 160°-170° | 103.8 | 2.2 |
| 170°-180° | 35.0 | 0.8 |
| 0°-30° | 703.0 | 15.1 |
| 0°-40° | 1145.0 | 24.6 |
| 0°-60° | 1914.0 | 41.1 |
| 0°-90° | 2273.7 | 48.8 |
| 90°-120° | 1136.8 | 24.4 |
| 90°-150° | 2073.6 | 44.5 |
| 90°-180° | 2382.0 | 51.2 |
| 0°-180° | 4656.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 909 | 909 | 909 | 909 | 909 | |
| 5° | 914 | 904 | 907 | 904 | 902 | 87 |
| 15° | 879 | 870 | 874 | 871 | 869 | 248 |
| 25° | 815 | 805 | 810 | 801 | 800 | 375 |
| 35° | 718 | 710 | 712 | 702 | 702 | 448 |
| 45° | 581 | 573 | 571 | 561 | 559 | 445 |
| 55° | 381 | 374 | 372 | 366 | 364 | 341 |
| 65° | 204 | 203 | 205 | 204 | 204 | 207 |
| 75° | 110 | 110 | 110 | 111 | 111 | 117 |
| 85° | 28 | 30 | 31 | 31 | 31 | 33 |
| 90° | 1 | 3 | 5 | 7 | 7 | 3 |
| 95° | 26 | 94 | 305 | 130 | 83 | 27 |
| 105° | 85 | 130 | 523 | 796 | 743 | 89 |
| 115° | 150 | 183 | 419 | 835 | 948 | 148 |
| 125° | 207 | 236 | 380 | 644 | 754 | 185 |
| 135° | 250 | 277 | 370 | 520 | 589 | 193 |
| 145° | 289 | 308 | 364 | 444 | 478 | 181 |
| 155° | 327 | 337 | 362 | 399 | 410 | 150 |
| 165° | 353 | 358 | 363 | 378 | 380 | 100 |
| 175° | 366 | 366 | 364 | 369 | 368 | 35 |
| 180° | 366 | 366 | 366 | 366 | 366 | |



TEST NUMBER: P564078

CATALOG NUMBER: SQ4-PR1-075U-075D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 909.1 | 909.1 | 909.1 | 909.1 | 909.1 |
| 2.5° | 914.8 | 906.8 | 909.1 | 907.2 | 902.9 |
| 5° | 913.8 | 903.9 | 906.8 | 903.6 | 902.1 |
| 7.5° | 906.8 | 897.0 | 899.9 | 896.8 | 895.8 |
| 10° | 900.5 | 891.3 | 894.3 | 891.1 | 889.6 |
| 12.5° | 893.6 | 883.8 | 887.4 | 883.6 | 882.1 |
| 15° | 879.4 | 870.2 | 873.9 | 870.7 | 869.2 |
| 17.5° | 863.7 | 853.9 | 857.6 | 854.0 | 852.0 |
| 20° | 851.2 | 842.0 | 845.7 | 840.2 | 839.5 |
| 22.5° | 837.4 | 828.2 | 831.9 | 824.6 | 824.4 |
| 25° | 815.2 | 805.2 | 809.7 | 801.1 | 800.3 |
| 27.5° | 788.7 | 779.5 | 783.2 | 774.4 | 773.5 |
| 30° | 770.5 | 761.4 | 765.1 | 755.6 | 754.1 |
| 32.5° | 749.9 | 741.3 | 744.4 | 735.0 | 734.1 |
| 35° | 718.1 | 709.7 | 711.8 | 702.4 | 701.6 |
| 37.5° | 681.9 | 674.2 | 675.5 | 665.1 | 664.4 |
| 40° | 656.2 | 648.6 | 649.2 | 638.2 | 637.4 |
| 42.5° | 628.0 | 620.4 | 619.7 | 608.7 | 608.0 |
| 45° | 581.0 | 573.4 | 570.9 | 560.6 | 559.1 |
| 47.5° | 527.5 | 519.8 | 515.1 | 506.8 | 505.7 |
| 50° | 488.6 | 481.0 | 476.9 | 469.8 | 467.5 |
| 52.5° | 446.7 | 439.0 | 435.5 | 429.1 | 426.8 |
| 55° | 380.6 | 374.4 | 372.0 | 365.7 | 364.1 |
| 57.5° | 317.8 | 313.6 | 312.9 | 306.8 | 306.2 |
| 60° | 279.6 | 277.3 | 277.2 | 271.7 | 271.7 |
| 62.5° | 247.0 | 245.3 | 246.5 | 242.9 | 242.3 |
| 65° | 204.4 | 202.9 | 205.2 | 203.6 | 203.6 |
| 67.5° | 170.7 | 170.7 | 172.1 | 171.5 | 171.5 |
| 70° | 151.9 | 151.9 | 152.7 | 152.7 | 152.7 |
| 72.5° | 135.0 | 134.4 | 136.4 | 136.4 | 135.8 |
| 75° | 110.4 | 110.4 | 110.4 | 111.2 | 111.2 |
| 77.5° | 86.0 | 86.1 | 86.8 | 86.6 | 86.0 |
| 80° | 69.7 | 70.5 | 70.5 | 69.7 | 69.7 |
| 82.5° | 53.4 | 54.2 | 54.2 | 54.0 | 53.4 |
| 85° | 28.2 | 29.7 | 31.3 | 31.3 | 31.3 |
| 87.5° | 8.3 | 11.2 | 13.6 | 13.9 | 13.3 |
| 90° | 0.8 | 3.1 | 5.4 | 7.0 | 7.0 |
| 92.5° | 10.7 | 45.9 | 79.5 | 30.5 | 25.1 |
| 95° | 25.7 | 94.1 | 305.0 | 130.4 | 83.3 |
| 97.5° | 41.9 | 104.4 | 465.4 | 358.6 | 253.0 |
| 100° | 53.7 | 110.7 | 515.9 | 520.7 | 424.8 |
| 102.5° | 64.9 | 118.3 | 528.9 | 646.0 | 558.0 |
| 105° | 84.8 | 130.5 | 522.9 | 796.3 | 743.0 |
| 107.5° | 103.8 | 145.5 | 493.1 | 869.9 | 885.7 |
| 110° | 117.5 | 155.5 | 470.7 | 888.2 | 943.0 |

TEST NUMBER: P564078

CATALOG NUMBER: SQ4-PR1-075U-075D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 129.9 | 166.8 | 448.3 | 876.4 | 959.8 |
| 115° | 150.2 | 182.9 | 419.4 | 835.1 | 947.7 |
| 117.5° | 169.5 | 199.6 | 401.0 | 777.1 | 904.4 |
| 120° | 181.3 | 210.2 | 392.9 | 733.6 | 865.2 |
| 122.5° | 191.9 | 220.8 | 387.3 | 695.5 | 820.4 |
| 125° | 207.0 | 235.9 | 380.5 | 643.6 | 753.9 |
| 127.5° | 221.3 | 248.8 | 376.0 | 600.4 | 697.1 |
| 130° | 228.8 | 256.9 | 373.5 | 574.7 | 662.9 |
| 132.5° | 237.5 | 265.6 | 371.6 | 552.1 | 631.8 |
| 135° | 249.8 | 277.1 | 369.6 | 520.5 | 589.0 |
| 137.5° | 261.3 | 286.7 | 367.9 | 495.0 | 551.5 |
| 140° | 270.0 | 293.6 | 367.2 | 478.1 | 529.1 |
| 142.5° | 277.5 | 299.2 | 366.0 | 463.0 | 506.7 |
| 145° | 288.7 | 308.4 | 364.1 | 443.5 | 477.7 |
| 147.5° | 300.6 | 317.7 | 363.2 | 426.2 | 453.6 |
| 150° | 308.1 | 323.3 | 362.6 | 416.7 | 438.0 |
| 152.5° | 315.0 | 329.0 | 362.0 | 408.6 | 426.2 |
| 155° | 326.8 | 337.4 | 361.8 | 398.6 | 410.0 |
| 157.5° | 335.3 | 344.0 | 361.8 | 390.5 | 398.4 |
| 160° | 341.6 | 348.4 | 361.8 | 386.1 | 392.1 |
| 162.5° | 346.5 | 352.2 | 362.4 | 382.3 | 387.2 |
| 165° | 353.2 | 357.8 | 363.4 | 378.2 | 380.5 |
| 167.5° | 357.9 | 361.4 | 364.1 | 374.7 | 375.3 |
| 170° | 361.0 | 363.3 | 364.1 | 373.5 | 373.5 |
| 172.5° | 363.5 | 364.6 | 364.1 | 371.6 | 371.0 |
| 175° | 365.7 | 366.4 | 364.1 | 368.8 | 368.0 |
| 177.5° | 366.3 | 366.3 | 363.8 | 367.5 | 366.3 |
| 180° | 365.7 | 365.7 | 365.7 | 365.7 | 365.7 |

(END OF REPORT)