

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: P563274

Luminaire Tested: **SQ4-PP3-050U-050D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563274
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-050U-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

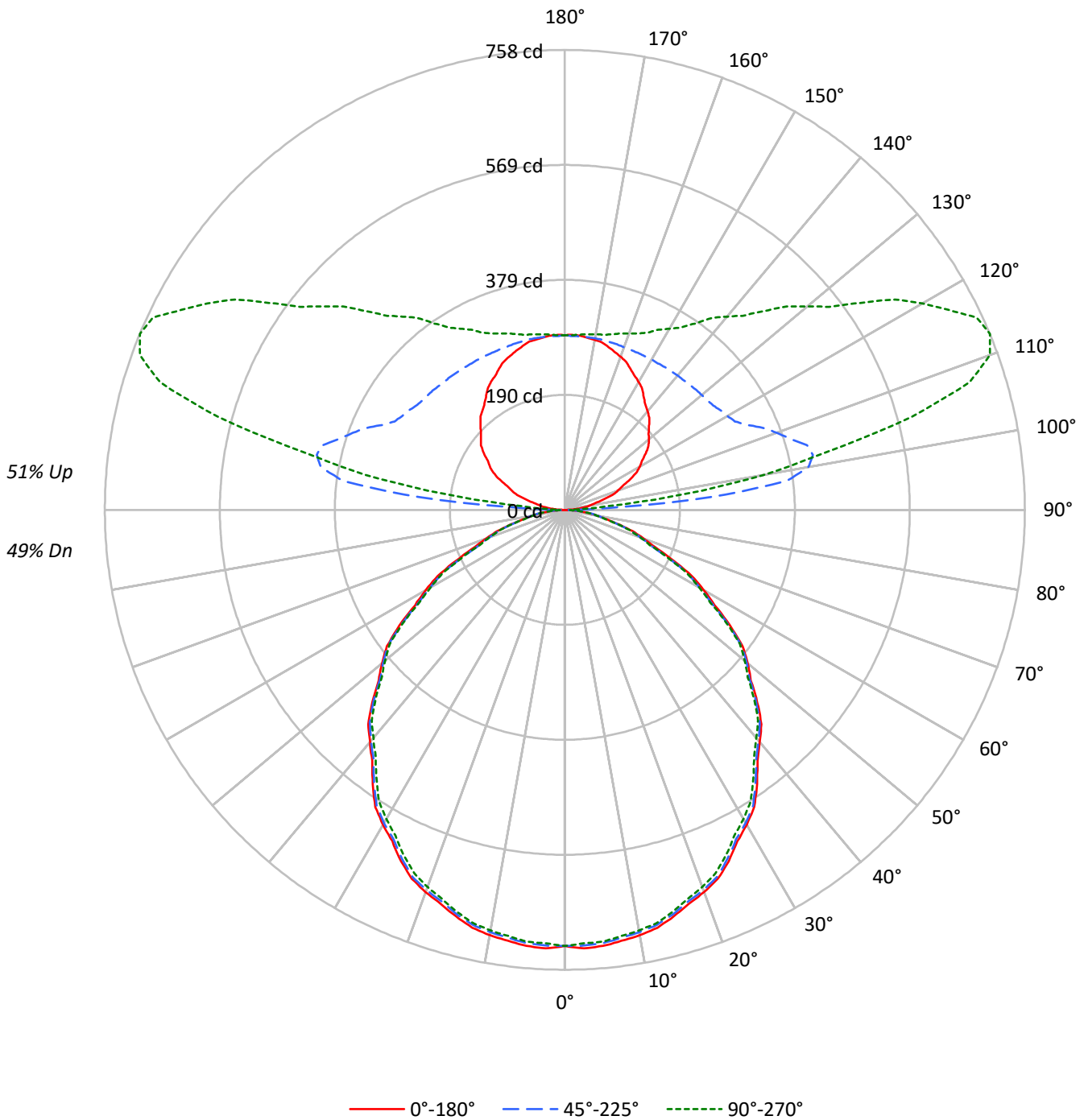
Lumens per Lamp: N/A
Luminaire Lumens: 3721.2 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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





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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 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 | 49 |
| 1 | 98 | 94 | 90 | 86 | 90 | 86 | 83 | 80 | 73 | 71 | 69 | 61 | 59 | 58 | 49 | 48 | 47 | 42 |
| 2 | 89 | 82 | 76 | 71 | 82 | 76 | 71 | 66 | 64 | 60 | 57 | 54 | 51 | 48 | 44 | 42 | 40 | 36 |
| 3 | 82 | 72 | 65 | 59 | 75 | 67 | 61 | 55 | 57 | 52 | 48 | 48 | 44 | 41 | 39 | 36 | 34 | 30 |
| 4 | 75 | 64 | 56 | 50 | 69 | 59 | 52 | 47 | 51 | 45 | 41 | 42 | 38 | 35 | 35 | 32 | 30 | 26 |
| 5 | 68 | 57 | 49 | 43 | 63 | 53 | 46 | 40 | 45 | 40 | 35 | 38 | 34 | 31 | 31 | 28 | 26 | 23 |
| 6 | 63 | 51 | 43 | 37 | 58 | 48 | 40 | 35 | 41 | 35 | 31 | 34 | 30 | 27 | 28 | 25 | 23 | 20 |
| 7 | 58 | 46 | 38 | 33 | 54 | 43 | 36 | 31 | 37 | 31 | 27 | 31 | 27 | 24 | 26 | 23 | 20 | 18 |
| 8 | 54 | 42 | 34 | 29 | 50 | 39 | 32 | 27 | 34 | 28 | 24 | 29 | 24 | 21 | 24 | 21 | 18 | 16 |
| 9 | 50 | 38 | 31 | 26 | 46 | 36 | 29 | 24 | 31 | 25 | 22 | 26 | 22 | 19 | 22 | 19 | 16 | 14 |
| 10 | 47 | 35 | 28 | 23 | 43 | 33 | 26 | 22 | 28 | 23 | 20 | 24 | 20 | 17 | 20 | 17 | 15 | 13 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6633 | 6633 | 6633 |
| 5° | 6681 | 6640 | 6617 |
| 10° | 6670 | 6623 | 6594 |
| 15° | 6626 | 6590 | 6553 |
| 20° | 6582 | 6545 | 6496 |
| 25° | 6504 | 6459 | 6395 |
| 30° | 6384 | 6349 | 6270 |
| 35° | 6216 | 6173 | 6096 |
| 40° | 6017 | 5980 | 5911 |
| 45° | 5853 | 5811 | 5754 |
| 50° | 5644 | 5606 | 5553 |
| 55° | 5352 | 5281 | 5239 |
| 60° | 4871 | 4731 | 4709 |
| 65° | 4292 | 4113 | 4100 |
| 70° | 3706 | 3553 | 3553 |
| 75° | 3190 | 3144 | 3098 |
| 80° | 2811 | 2848 | 2779 |
| 85° | 2202 | 2403 | 2403 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 68.0 | 1.8 |
| 10°-20° | 194.1 | 5.2 |
| 20°-30° | 290.7 | 7.8 |
| 30°-40° | 341.0 | 9.2 |
| 40°-50° | 342.1 | 9.2 |
| 50°-60° | 291.8 | 7.8 |
| 60°-70° | 190.3 | 5.1 |
| 70°-80° | 95.5 | 2.6 |
| 80°-90° | 27.5 | 0.7 |
| 90°-100° | 138.2 | 3.7 |
| 100°-110° | 375.5 | 10.1 |
| 110°-120° | 386.1 | 10.4 |
| 120°-130° | 308.7 | 8.3 |
| 130°-140° | 242.5 | 6.5 |
| 140°-150° | 186.0 | 5.0 |
| 150°-160° | 133.7 | 3.6 |
| 160°-170° | 81.8 | 2.2 |
| 170°-180° | 27.6 | 0.7 |
| 0°-30° | 552.8 | 14.9 |
| 0°-40° | 893.8 | 24.0 |
| 0°-60° | 1527.7 | 41.1 |
| 0°-90° | 1841.1 | 49.5 |
| 90°-120° | 899.8 | 24.2 |
| 90°-150° | 1637.0 | 44.0 |
| 90°-180° | 1880.0 | 50.5 |
| 0°-180° | 3721.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 719 | 719 | 719 | 719 | 719 | |
| 5° | 721 | 715 | 717 | 714 | 714 | 69 |
| 15° | 694 | 687 | 690 | 687 | 686 | 196 |
| 25° | 639 | 632 | 634 | 629 | 628 | 294 |
| 35° | 552 | 546 | 548 | 542 | 541 | 345 |
| 45° | 449 | 446 | 445 | 441 | 441 | 345 |
| 55° | 333 | 331 | 328 | 326 | 326 | 296 |
| 65° | 197 | 193 | 188 | 187 | 188 | 196 |
| 75° | 90 | 90 | 88 | 88 | 87 | 97 |
| 85° | 21 | 23 | 23 | 23 | 23 | 24 |
| 90° | 1 | 4 | 6 | 8 | 8 | 2 |
| 95° | 20 | 76 | 241 | 105 | 70 | 22 |
| 105° | 67 | 104 | 413 | 629 | 592 | 71 |
| 115° | 118 | 144 | 330 | 658 | 749 | 117 |
| 125° | 163 | 186 | 299 | 504 | 594 | 145 |
| 135° | 196 | 218 | 291 | 410 | 463 | 152 |
| 145° | 227 | 243 | 287 | 349 | 375 | 142 |
| 155° | 256 | 266 | 285 | 313 | 322 | 118 |
| 165° | 278 | 281 | 286 | 298 | 299 | 78 |
| 175° | 288 | 289 | 287 | 291 | 290 | 27 |
| 180° | 288 | 288 | 288 | 288 | 288 | |

TEST NUMBER: P563274

CATALOG NUMBER: SQ4-PP3-050U-050D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 718.9 | 718.9 | 718.9 | 718.9 | 718.9 |
| 2.5° | 723.4 | 717.5 | 718.9 | 717.8 | 714.9 |
| 5° | 721.4 | 714.6 | 717.0 | 714.5 | 714.5 |
| 7.5° | 716.5 | 709.1 | 711.5 | 708.9 | 708.8 |
| 10° | 712.0 | 704.6 | 706.9 | 704.4 | 703.8 |
| 12.5° | 705.4 | 698.0 | 700.9 | 697.8 | 697.7 |
| 15° | 693.7 | 686.9 | 689.9 | 687.4 | 686.1 |
| 17.5° | 680.5 | 673.1 | 676.7 | 673.1 | 672.6 |
| 20° | 670.4 | 663.0 | 666.6 | 661.6 | 661.6 |
| 22.5° | 658.3 | 650.9 | 655.0 | 648.5 | 648.5 |
| 25° | 638.9 | 631.5 | 634.5 | 628.8 | 628.2 |
| 27.5° | 615.8 | 608.5 | 611.7 | 605.2 | 605.1 |
| 30° | 599.2 | 592.4 | 596.0 | 589.1 | 588.5 |
| 32.5° | 581.0 | 574.8 | 577.4 | 570.4 | 569.8 |
| 35° | 551.9 | 546.4 | 548.1 | 541.8 | 541.2 |
| 37.5° | 521.3 | 515.6 | 517.7 | 512.2 | 512.0 |
| 40° | 499.6 | 495.9 | 496.5 | 492.0 | 490.8 |
| 42.5° | 479.5 | 475.3 | 475.8 | 471.4 | 471.2 |
| 45° | 448.6 | 445.5 | 445.4 | 441.0 | 441.0 |
| 47.5° | 415.8 | 413.5 | 412.8 | 409.2 | 409.0 |
| 50° | 393.2 | 391.3 | 390.6 | 387.5 | 386.9 |
| 52.5° | 369.5 | 368.6 | 366.4 | 363.8 | 363.7 |
| 55° | 332.7 | 331.4 | 328.3 | 326.4 | 325.7 |
| 57.5° | 292.7 | 290.3 | 286.7 | 283.9 | 284.4 |
| 60° | 264.0 | 261.5 | 256.4 | 255.2 | 255.2 |
| 62.5° | 236.3 | 233.3 | 228.2 | 226.5 | 227.5 |
| 65° | 196.6 | 192.9 | 188.4 | 187.1 | 187.8 |
| 67.5° | 160.5 | 157.2 | 152.3 | 152.3 | 151.8 |
| 70° | 137.4 | 135.5 | 131.7 | 131.7 | 131.7 |
| 72.5° | 116.7 | 115.8 | 113.0 | 113.0 | 112.5 |
| 75° | 89.5 | 89.5 | 88.2 | 87.6 | 86.9 |
| 77.5° | 67.0 | 67.3 | 66.7 | 66.0 | 64.9 |
| 80° | 52.9 | 54.2 | 53.6 | 52.9 | 52.3 |
| 82.5° | 39.8 | 41.1 | 41.0 | 39.8 | 39.7 |
| 85° | 20.8 | 22.6 | 22.7 | 22.7 | 22.7 |
| 87.5° | 5.7 | 8.2 | 9.4 | 9.7 | 10.2 |
| 90° | 0.9 | 3.6 | 6.5 | 8.3 | 8.3 |
| 92.5° | 8.3 | 37.8 | 65.7 | 28.2 | 23.9 |
| 95° | 20.4 | 75.6 | 240.7 | 104.8 | 70.4 |
| 97.5° | 33.7 | 83.5 | 369.1 | 287.1 | 201.7 |
| 100° | 42.6 | 88.8 | 408.3 | 413.9 | 334.3 |
| 102.5° | 51.5 | 94.0 | 418.7 | 511.9 | 441.7 |
| 105° | 66.7 | 103.8 | 413.0 | 628.8 | 591.7 |
| 107.5° | 82.4 | 115.2 | 389.1 | 689.1 | 699.4 |
| 110° | 93.5 | 123.4 | 371.3 | 701.0 | 745.4 |



TEST NUMBER: P563274

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 103.1 | 131.6 | 353.5 | 691.1 | 757.9 |
| 115° | 118.5 | 143.9 | 330.5 | 657.6 | 749.1 |
| 117.5° | 133.0 | 157.2 | 315.9 | 610.1 | 713.1 |
| 120° | 142.6 | 166.1 | 309.3 | 578.2 | 680.5 |
| 122.5° | 150.7 | 174.3 | 304.8 | 546.3 | 645.0 |
| 125° | 163.0 | 185.6 | 299.1 | 503.9 | 594.4 |
| 127.5° | 173.9 | 196.3 | 295.9 | 471.8 | 549.4 |
| 130° | 180.6 | 202.3 | 294.4 | 451.6 | 521.3 |
| 132.5° | 187.2 | 208.9 | 293.0 | 434.4 | 496.1 |
| 135° | 196.3 | 218.0 | 290.7 | 410.4 | 463.0 |
| 137.5° | 206.1 | 225.8 | 289.6 | 389.3 | 433.5 |
| 140° | 212.0 | 231.0 | 288.9 | 375.9 | 415.7 |
| 142.5° | 218.0 | 235.5 | 288.1 | 365.4 | 398.7 |
| 145° | 226.8 | 243.1 | 287.0 | 348.7 | 375.0 |
| 147.5° | 236.8 | 250.8 | 286.1 | 335.6 | 356.3 |
| 150° | 243.5 | 255.3 | 286.1 | 328.1 | 344.4 |
| 152.5° | 248.7 | 259.0 | 285.4 | 321.4 | 334.8 |
| 155° | 256.5 | 265.5 | 285.2 | 313.2 | 322.2 |
| 157.5° | 264.1 | 271.1 | 285.2 | 307.6 | 314.4 |
| 160° | 268.5 | 274.9 | 285.2 | 303.8 | 309.3 |
| 162.5° | 273.0 | 277.8 | 285.9 | 300.8 | 304.8 |
| 165° | 277.8 | 281.4 | 286.1 | 298.2 | 299.1 |
| 167.5° | 282.8 | 284.6 | 287.0 | 295.0 | 295.7 |
| 170° | 284.3 | 286.1 | 287.0 | 293.5 | 293.5 |
| 172.5° | 285.7 | 286.8 | 287.0 | 292.0 | 292.0 |
| 175° | 288.0 | 288.9 | 287.0 | 290.7 | 289.8 |
| 177.5° | 288.7 | 288.7 | 286.5 | 289.4 | 288.0 |
| 180° | 288.0 | 288.0 | 288.0 | 288.0 | 288.0 |

(END OF REPORT)