

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P845276

Luminaire Tested: **SQ4P-PW1-100U-050D-B35-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845276
REPORT IS A COMBINATION OF REPORTS P700095 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-100U-050D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

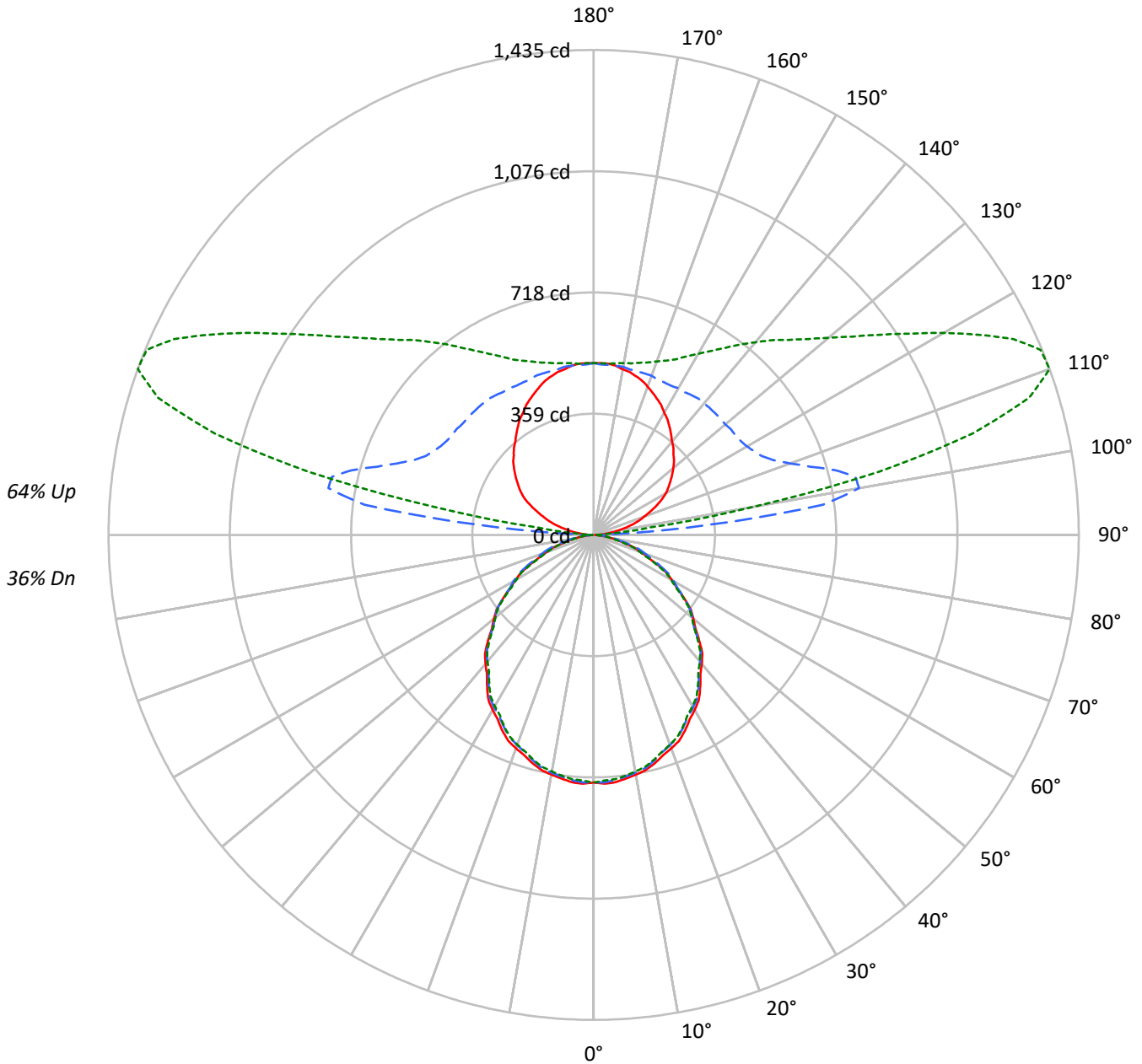
Lumens per Lamp: N/A
Luminaire Lumens: 5166.2 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.8
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 FT

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Luminous Intensity Polar Plot





TEST NUMBER: P845276

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 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 | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 59 | 59 | 59 | 43 | 43 | 43 | 36 | | | | 36 |
| 1 | 95 | 91 | 87 | 83 | 86 | 82 | 79 | 76 | 66 | 64 | 62 | 52 | 50 | 49 | 38 | 38 | 37 | 31 | | | | 31 |
| 2 | 86 | 79 | 73 | 68 | 78 | 72 | 67 | 62 | 58 | 55 | 51 | 46 | 43 | 41 | 34 | 32 | 31 | 26 | | | | 26 |
| 3 | 79 | 70 | 62 | 57 | 71 | 63 | 57 | 52 | 51 | 47 | 43 | 40 | 37 | 35 | 30 | 28 | 26 | 22 | | | | 22 |
| 4 | 72 | 61 | 54 | 48 | 65 | 56 | 49 | 44 | 46 | 41 | 37 | 36 | 32 | 30 | 27 | 25 | 23 | 19 | | | | 19 |
| 5 | 66 | 55 | 47 | 41 | 59 | 50 | 43 | 38 | 41 | 36 | 32 | 32 | 29 | 26 | 24 | 22 | 20 | 16 | | | | 16 |
| 6 | 61 | 49 | 41 | 35 | 55 | 45 | 38 | 33 | 37 | 31 | 28 | 29 | 25 | 22 | 22 | 19 | 17 | 14 | | | | 14 |
| 7 | 56 | 44 | 36 | 31 | 51 | 40 | 33 | 29 | 33 | 28 | 24 | 26 | 23 | 20 | 20 | 17 | 15 | 13 | | | | 13 |
| 8 | 52 | 40 | 32 | 27 | 47 | 37 | 30 | 25 | 30 | 25 | 21 | 24 | 20 | 18 | 18 | 16 | 14 | 11 | | | | 11 |
| 9 | 48 | 36 | 29 | 24 | 44 | 33 | 27 | 22 | 28 | 23 | 19 | 22 | 18 | 16 | 17 | 14 | 12 | 10 | | | | 10 |
| 10 | 45 | 33 | 26 | 22 | 41 | 31 | 24 | 20 | 25 | 20 | 17 | 20 | 17 | 14 | 16 | 13 | 11 | 9 | | | | 9 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6760 | 6760 | 6760 |
| 5° | 6803 | 6750 | 6720 |
| 10° | 6749 | 6695 | 6658 |
| 15° | 6679 | 6604 | 6579 |
| 20° | 6598 | 6496 | 6484 |
| 25° | 6506 | 6388 | 6368 |
| 30° | 6369 | 6273 | 6231 |
| 35° | 6188 | 6099 | 6063 |
| 40° | 5994 | 5902 | 5877 |
| 45° | 5761 | 5686 | 5660 |
| 50° | 5523 | 5476 | 5439 |
| 55° | 5263 | 5263 | 5181 |
| 60° | 4943 | 5039 | 4860 |
| 65° | 4523 | 4748 | 4412 |
| 70° | 3987 | 4373 | 3882 |
| 75° | 3408 | 3911 | 3315 |
| 80° | 2641 | 3289 | 2678 |
| 85° | 1704 | 2530 | 2244 |



TEST NUMBER: P845276

CATALOG NUMBER: SQ4P-PW1-100U-050D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 69.0 | 1.3 |
| 10°-20° | 194.8 | 3.8 |
| 20°-30° | 288.9 | 5.6 |
| 30°-40° | 338.1 | 6.5 |
| 40°-50° | 336.6 | 6.5 |
| 50°-60° | 290.7 | 5.6 |
| 60°-70° | 209.2 | 4.1 |
| 70°-80° | 109.7 | 2.1 |
| 80°-90° | 28.4 | 0.6 |
| 90°-100° | 202.4 | 3.9 |
| 100°-110° | 704.3 | 13.6 |
| 110°-120° | 682.2 | 13.2 |
| 120°-130° | 535.2 | 10.4 |
| 130°-140° | 423.6 | 8.2 |
| 140°-150° | 326.9 | 6.3 |
| 150°-160° | 234.3 | 4.5 |
| 160°-170° | 143.3 | 2.8 |
| 170°-180° | 48.5 | 0.9 |
| 0°-30° | 552.7 | 10.7 |
| 0°-40° | 890.8 | 17.2 |
| 0°-60° | 1518.0 | 29.4 |
| 0°-90° | 1865.4 | 36.1 |
| 90°-120° | 1588.9 | 30.8 |
| 90°-150° | 2874.6 | 55.6 |
| 90°-180° | 3301.0 | 63.9 |
| 0°-180° | 5166.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|------|------|
| 0° | 733 | 733 | 733 | 733 | 733 | |
| 5° | 735 | 726 | 729 | 727 | 726 | 70 |
| 15° | 699 | 690 | 691 | 690 | 689 | 197 |
| 25° | 639 | 628 | 628 | 624 | 626 | 294 |
| 35° | 549 | 542 | 542 | 536 | 538 | 343 |
| 45° | 442 | 438 | 436 | 434 | 434 | 341 |
| 55° | 327 | 327 | 327 | 323 | 322 | 292 |
| 65° | 207 | 214 | 218 | 209 | 202 | 205 |
| 75° | 96 | 104 | 110 | 102 | 93 | 102 |
| 85° | 16 | 21 | 24 | 23 | 21 | 21 |
| 90° | 8 | 11 | 11 | 8 | 4 | 5 |
| 95° | 34 | 118 | 342 | 87 | 53 | 36 |
| 105° | 118 | 167 | 740 | 1249 | 1162 | 124 |
| 115° | 205 | 247 | 550 | 1162 | 1370 | 202 |
| 125° | 277 | 342 | 512 | 865 | 1032 | 248 |
| 135° | 334 | 376 | 509 | 721 | 816 | 259 |
| 145° | 391 | 418 | 505 | 622 | 676 | 245 |
| 155° | 444 | 459 | 497 | 554 | 573 | 205 |
| 165° | 486 | 490 | 501 | 524 | 528 | 137 |
| 175° | 509 | 509 | 505 | 512 | 509 | 48 |
| 180° | 509 | 509 | 509 | 509 | 509 | |



TEST NUMBER: P845276

CATALOG NUMBER: SQ4P-PW1-100U-050D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 0° | 732.7 | 732.7 | 732.7 | 732.7 | 732.7 |
| 2.5° | 736.9 | 730.8 | 732.7 | 731.1 | 727.6 |
| 5° | 734.6 | 726.4 | 728.8 | 726.9 | 725.6 |
| 7.5° | 727.2 | 719.6 | 721.3 | 719.2 | 718.6 |
| 10° | 720.4 | 712.9 | 714.6 | 712.1 | 710.7 |
| 12.5° | 712.7 | 704.6 | 706.4 | 703.7 | 703.0 |
| 15° | 699.2 | 690.3 | 691.4 | 690.0 | 688.8 |
| 17.5° | 683.3 | 674.4 | 674.5 | 672.6 | 672.2 |
| 20° | 672.0 | 662.6 | 661.6 | 659.1 | 660.4 |
| 22.5° | 659.7 | 649.7 | 648.8 | 645.2 | 646.9 |
| 25° | 639.1 | 628.3 | 627.5 | 623.6 | 625.5 |
| 27.5° | 615.3 | 604.8 | 604.8 | 599.4 | 601.3 |
| 30° | 597.8 | 587.6 | 588.8 | 582.3 | 584.9 |
| 32.5° | 579.2 | 570.1 | 570.6 | 564.2 | 566.9 |
| 35° | 549.4 | 541.8 | 541.5 | 536.4 | 538.3 |
| 37.5° | 518.8 | 512.2 | 511.1 | 508.2 | 508.7 |
| 40° | 497.7 | 492.0 | 490.0 | 488.0 | 488.0 |
| 42.5° | 475.5 | 470.4 | 468.2 | 466.8 | 466.4 |
| 45° | 441.5 | 437.8 | 435.8 | 434.4 | 433.8 |
| 47.5° | 408.0 | 404.4 | 402.7 | 401.8 | 401.1 |
| 50° | 384.8 | 382.2 | 381.5 | 379.6 | 378.9 |
| 52.5° | 361.6 | 360.0 | 359.3 | 356.9 | 356.2 |
| 55° | 327.2 | 326.7 | 327.2 | 322.8 | 322.1 |
| 57.5° | 291.6 | 292.7 | 294.7 | 288.7 | 287.1 |
| 60° | 267.9 | 270.4 | 273.1 | 266.0 | 263.4 |
| 62.5° | 243.6 | 247.7 | 251.4 | 243.2 | 239.6 |
| 65° | 207.2 | 213.5 | 217.5 | 209.0 | 202.1 |
| 67.5° | 172.1 | 180.0 | 184.8 | 175.6 | 167.7 |
| 70° | 147.8 | 156.7 | 162.1 | 152.8 | 143.9 |
| 72.5° | 126.6 | 136.5 | 140.9 | 132.1 | 123.3 |
| 75° | 95.6 | 104.4 | 109.7 | 102.4 | 93.0 |
| 77.5° | 67.8 | 76.1 | 80.5 | 74.2 | 66.3 |
| 80° | 49.7 | 58.5 | 61.9 | 56.7 | 50.4 |
| 82.5° | 35.2 | 42.7 | 44.9 | 41.7 | 37.4 |
| 85° | 16.1 | 21.1 | 23.9 | 22.6 | 21.2 |
| 87.5° | 4.1 | 7.6 | 9.8 | 9.8 | 10.4 |
| 90° | 7.6 | 11.4 | 11.4 | 7.6 | 3.8 |
| 92.5° | 19.0 | 57.0 | 53.1 | 22.8 | 19.0 |
| 95° | 34.2 | 117.6 | 341.6 | 87.3 | 53.1 |
| 97.5° | 53.1 | 132.9 | 683.2 | 311.3 | 167.0 |
| 100° | 72.1 | 140.4 | 797.0 | 747.7 | 482.0 |
| 102.5° | 94.9 | 151.8 | 793.2 | 1051.4 | 865.3 |
| 105° | 117.6 | 167.0 | 740.1 | 1248.7 | 1161.5 |



TEST NUMBER: P845276

CATALOG NUMBER: SQ4P-PW1-100U-050D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 182.2 | 223.9 | 577.0 | 1256.3 | 1431.0 |
| 115° | 204.9 | 246.7 | 550.3 | 1161.5 | 1370.2 |
| 117.5° | 227.7 | 273.3 | 535.2 | 1074.2 | 1282.9 |
| 120° | 246.7 | 296.0 | 523.8 | 990.6 | 1195.6 |
| 122.5° | 261.9 | 318.8 | 516.2 | 922.3 | 1108.3 |
| 125° | 277.0 | 341.6 | 512.4 | 865.3 | 1032.4 |
| 127.5° | 292.3 | 356.8 | 512.4 | 823.7 | 964.1 |
| 130° | 307.5 | 364.4 | 508.6 | 781.9 | 907.1 |
| 132.5° | 322.6 | 368.1 | 508.6 | 751.5 | 857.8 |
| 135° | 334.0 | 375.8 | 508.6 | 721.2 | 816.0 |
| 137.5° | 349.2 | 383.3 | 508.6 | 694.6 | 781.9 |
| 140° | 360.6 | 394.8 | 508.6 | 668.0 | 743.9 |
| 142.5° | 375.8 | 406.1 | 508.6 | 641.5 | 709.8 |
| 145° | 390.9 | 417.6 | 504.8 | 622.5 | 675.6 |
| 147.5° | 406.1 | 428.9 | 501.0 | 603.5 | 645.3 |
| 150° | 417.6 | 440.3 | 501.0 | 584.5 | 618.6 |
| 152.5° | 432.7 | 451.7 | 497.2 | 565.5 | 595.9 |
| 155° | 444.1 | 459.2 | 497.2 | 554.2 | 573.1 |
| 157.5° | 455.4 | 470.7 | 497.2 | 542.8 | 558.0 |
| 160° | 466.9 | 478.2 | 501.0 | 535.2 | 546.5 |
| 162.5° | 478.2 | 485.9 | 501.0 | 527.5 | 535.2 |
| 165° | 485.9 | 489.7 | 501.0 | 523.8 | 527.5 |
| 167.5° | 493.4 | 497.2 | 501.0 | 520.0 | 520.0 |
| 170° | 497.2 | 501.0 | 504.8 | 516.2 | 516.2 |
| 172.5° | 504.8 | 504.8 | 504.8 | 512.4 | 512.4 |
| 175° | 508.6 | 508.6 | 504.8 | 512.4 | 508.6 |
| 177.5° | 508.6 | 508.6 | 504.8 | 512.4 | 508.6 |
| 180° | 508.6 | 508.6 | 508.6 | 508.6 | 508.6 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







| | | | | | |
|--------|-------|-------|-------|--------|--------|
| 107.5° | 140.4 | 186.0 | 671.8 | 1336.0 | 1351.2 |
| 110° | 159.4 | 204.9 | 618.6 | 1324.7 | 1434.7 |



(END OF REPORT)