

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: P845253

Luminaire Tested: **SQ4P-PW1-075U-050D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845253
REPORT IS A COMBINATION OF REPORTS P700235 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-075U-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

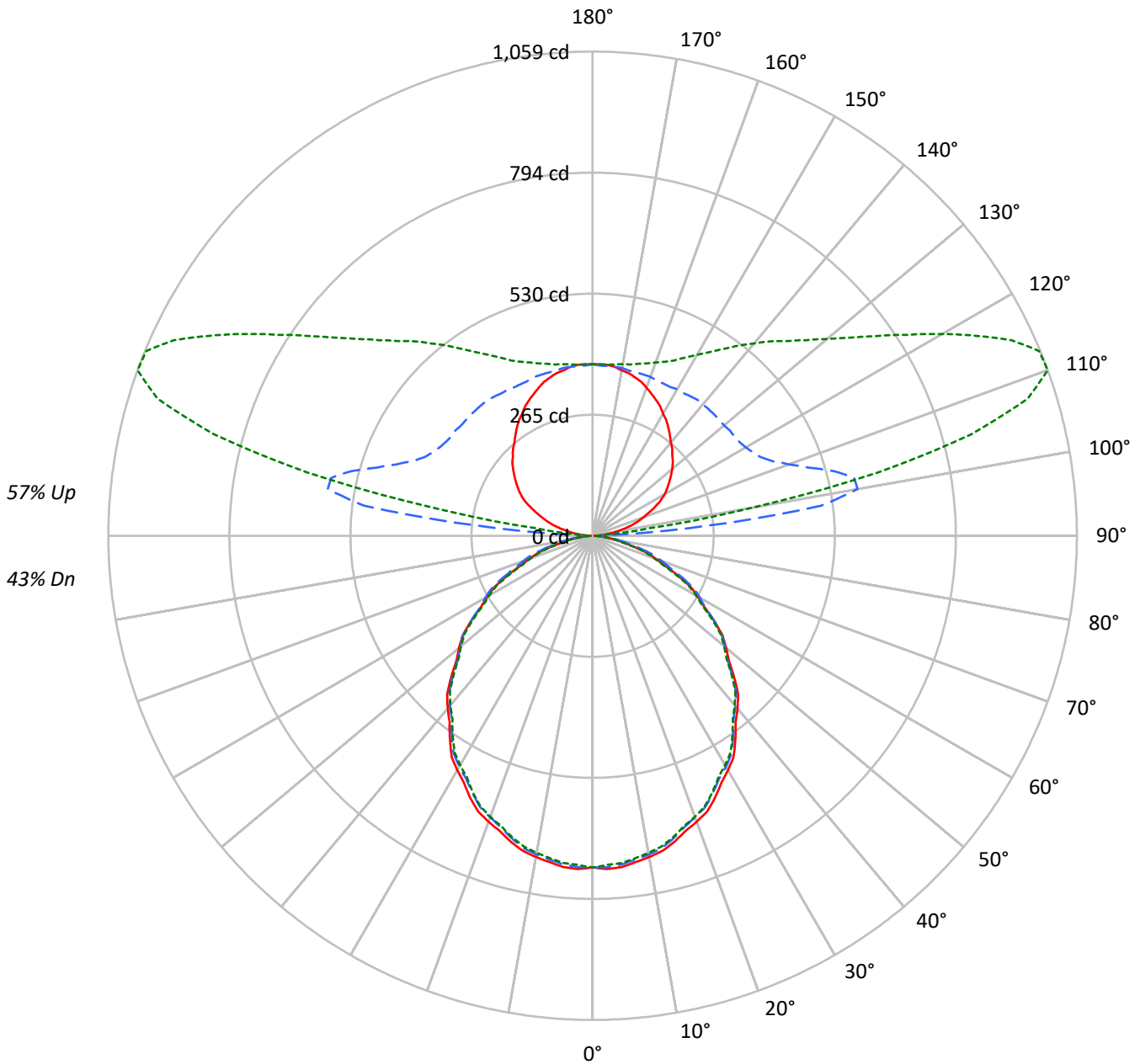
Lumens per Lamp: N/A
Luminaire Lumens: 4283.5 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 35.8
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

TEST NUMBER: P845253

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Luminous Intensity Polar Plot





TEST NUMBER: P845253

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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 | 106 | 106 | 106 | 106 | 96 | 96 | 96 | 96 | 80 | 80 | 80 | 64 | 64 | 64 | 50 | 50 | 50 | 43 | | | 43 |
| 1 | 96 | 92 | 88 | 85 | 88 | 84 | 81 | 78 | 70 | 68 | 65 | 56 | 55 | 53 | 44 | 43 | 42 | 37 | | | 37 |
| 2 | 88 | 80 | 74 | 69 | 80 | 74 | 69 | 64 | 61 | 57 | 54 | 50 | 47 | 45 | 39 | 37 | 36 | 31 | | | 31 |
| 3 | 80 | 71 | 64 | 58 | 73 | 65 | 59 | 54 | 54 | 49 | 46 | 44 | 41 | 38 | 35 | 32 | 30 | 26 | | | 26 |
| 4 | 73 | 63 | 55 | 49 | 67 | 58 | 51 | 46 | 48 | 43 | 39 | 39 | 35 | 32 | 31 | 28 | 26 | 22 | | | 22 |
| 5 | 67 | 56 | 48 | 42 | 61 | 51 | 44 | 39 | 43 | 38 | 34 | 35 | 31 | 28 | 28 | 25 | 23 | 19 | | | 19 |
| 6 | 62 | 50 | 42 | 36 | 56 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 25 | 25 | 22 | 20 | 17 | | | 17 |
| 7 | 57 | 45 | 37 | 32 | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 20 | 18 | 15 | | | 15 |
| 8 | 53 | 41 | 33 | 28 | 48 | 38 | 31 | 26 | 32 | 27 | 23 | 26 | 22 | 19 | 21 | 18 | 16 | 14 | | | 14 |
| 9 | 49 | 37 | 30 | 25 | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 20 | 17 | 14 | 12 | | | 12 |
| 10 | 46 | 34 | 27 | 22 | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 16 | 18 | 15 | 13 | 11 | | | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6694 | 6694 | 6694 |
| 5° | 6738 | 6685 | 6655 |
| 10° | 6684 | 6630 | 6594 |
| 15° | 6614 | 6539 | 6515 |
| 20° | 6534 | 6433 | 6421 |
| 25° | 6443 | 6326 | 6305 |
| 30° | 6307 | 6212 | 6171 |
| 35° | 6127 | 6040 | 6004 |
| 40° | 5936 | 5844 | 5821 |
| 45° | 5705 | 5630 | 5605 |
| 50° | 5469 | 5423 | 5385 |
| 55° | 5213 | 5213 | 5131 |
| 60° | 4895 | 4991 | 4814 |
| 65° | 4480 | 4702 | 4368 |
| 70° | 3947 | 4330 | 3844 |
| 75° | 3376 | 3871 | 3283 |
| 80° | 2614 | 3257 | 2651 |
| 85° | 1694 | 2498 | 2223 |



TEST NUMBER: P845253

CATALOG NUMBER: SQ4P-PW1-075U-050D-B40-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 68.3 | 1.6 |
| 10°-20° | 192.9 | 4.5 |
| 20°-30° | 286.1 | 6.7 |
| 30°-40° | 334.8 | 7.8 |
| 40°-50° | 333.3 | 7.8 |
| 50°-60° | 287.8 | 6.7 |
| 60°-70° | 207.2 | 4.8 |
| 70°-80° | 108.6 | 2.5 |
| 80°-90° | 27.8 | 0.6 |
| 90°-100° | 149.4 | 3.5 |
| 100°-110° | 519.9 | 12.1 |
| 110°-120° | 503.6 | 11.8 |
| 120°-130° | 395.1 | 9.2 |
| 130°-140° | 312.7 | 7.3 |
| 140°-150° | 241.3 | 5.6 |
| 150°-160° | 173.0 | 4.0 |
| 160°-170° | 105.8 | 2.5 |
| 170°-180° | 35.8 | 0.8 |
| 0°-30° | 547.4 | 12.8 |
| 0°-40° | 882.2 | 20.6 |
| 0°-60° | 1503.3 | 35.1 |
| 0°-90° | 1847.0 | 43.1 |
| 90°-120° | 1172.9 | 27.4 |
| 90°-150° | 2122.0 | 49.5 |
| 90°-180° | 2437.0 | 56.9 |
| 0°-180° | 4283.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|------|------|
| 0° | 726 | 726 | 726 | 726 | 726 | |
| 5° | 728 | 719 | 722 | 720 | 719 | 69 |
| 15° | 692 | 684 | 685 | 683 | 682 | 195 |
| 25° | 633 | 622 | 621 | 618 | 619 | 291 |
| 35° | 544 | 537 | 536 | 531 | 533 | 340 |
| 45° | 437 | 434 | 432 | 430 | 430 | 337 |
| 55° | 324 | 324 | 324 | 320 | 319 | 289 |
| 65° | 205 | 211 | 215 | 207 | 200 | 203 |
| 75° | 95 | 103 | 109 | 101 | 92 | 101 |
| 85° | 16 | 21 | 24 | 22 | 21 | 21 |
| 90° | 6 | 8 | 8 | 6 | 3 | 4 |
| 95° | 25 | 87 | 252 | 64 | 39 | 27 |
| 105° | 87 | 123 | 546 | 922 | 857 | 91 |
| 115° | 151 | 182 | 406 | 857 | 1011 | 149 |
| 125° | 205 | 252 | 378 | 639 | 762 | 183 |
| 135° | 246 | 277 | 375 | 532 | 602 | 191 |
| 145° | 289 | 308 | 373 | 460 | 499 | 181 |
| 155° | 328 | 339 | 367 | 409 | 423 | 151 |
| 165° | 359 | 362 | 370 | 387 | 390 | 101 |
| 175° | 375 | 375 | 373 | 378 | 375 | 36 |
| 180° | 375 | 375 | 375 | 375 | 375 | |



TEST NUMBER: P845253

CATALOG NUMBER: SQ4P-PW1-075U-050D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 725.5 | 725.5 | 725.5 | 725.5 | 725.5 |
| 2.5° | 729.7 | 723.7 | 725.5 | 724.0 | 720.5 |
| 5° | 727.5 | 719.3 | 721.8 | 719.8 | 718.6 |
| 7.5° | 720.1 | 712.6 | 714.3 | 712.3 | 711.6 |
| 10° | 713.4 | 706.0 | 707.7 | 705.2 | 703.8 |
| 12.5° | 705.8 | 697.7 | 699.6 | 696.9 | 696.2 |
| 15° | 692.4 | 683.6 | 684.6 | 683.3 | 682.1 |
| 17.5° | 676.7 | 667.9 | 668.0 | 666.0 | 665.6 |
| 20° | 665.5 | 656.2 | 655.2 | 652.7 | 654.0 |
| 22.5° | 653.2 | 643.4 | 642.5 | 638.9 | 640.6 |
| 25° | 632.9 | 622.2 | 621.4 | 617.6 | 619.4 |
| 27.5° | 609.3 | 598.9 | 598.9 | 593.6 | 595.5 |
| 30° | 592.0 | 581.9 | 583.1 | 576.7 | 579.2 |
| 32.5° | 573.6 | 564.6 | 565.1 | 558.8 | 561.4 |
| 35° | 544.0 | 536.6 | 536.3 | 531.2 | 533.1 |
| 37.5° | 513.8 | 507.2 | 506.1 | 503.2 | 503.7 |
| 40° | 492.9 | 487.2 | 485.2 | 483.3 | 483.3 |
| 42.5° | 470.9 | 465.8 | 463.7 | 462.2 | 461.9 |
| 45° | 437.2 | 433.6 | 431.5 | 430.2 | 429.6 |
| 47.5° | 404.0 | 400.5 | 398.8 | 397.9 | 397.2 |
| 50° | 381.0 | 378.5 | 377.8 | 375.9 | 375.2 |
| 52.5° | 358.1 | 356.5 | 355.8 | 353.4 | 352.7 |
| 55° | 324.1 | 323.6 | 324.1 | 319.7 | 319.0 |
| 57.5° | 288.8 | 289.8 | 291.9 | 285.9 | 284.3 |
| 60° | 265.3 | 267.8 | 270.5 | 263.4 | 260.9 |
| 62.5° | 241.2 | 245.3 | 249.0 | 240.8 | 237.2 |
| 65° | 205.2 | 211.4 | 215.4 | 207.0 | 200.1 |
| 67.5° | 170.5 | 178.2 | 183.0 | 173.8 | 166.1 |
| 70° | 146.3 | 155.1 | 160.5 | 151.3 | 142.5 |
| 72.5° | 125.4 | 135.2 | 139.5 | 130.8 | 122.1 |
| 75° | 94.7 | 103.4 | 108.6 | 101.4 | 92.1 |
| 77.5° | 67.2 | 75.4 | 79.8 | 73.5 | 65.7 |
| 80° | 49.2 | 57.9 | 61.3 | 56.1 | 49.9 |
| 82.5° | 34.9 | 42.3 | 44.5 | 41.3 | 37.0 |
| 85° | 16.0 | 20.9 | 23.6 | 22.4 | 21.0 |
| 87.5° | 4.1 | 7.6 | 9.7 | 9.7 | 10.3 |
| 90° | 5.6 | 8.4 | 8.4 | 5.6 | 2.8 |
| 92.5° | 14.1 | 42.1 | 39.2 | 16.8 | 14.1 |
| 95° | 25.2 | 86.8 | 252.2 | 64.4 | 39.2 |
| 97.5° | 39.2 | 98.1 | 504.3 | 229.8 | 123.3 |
| 100° | 53.2 | 103.7 | 588.3 | 552.0 | 355.8 |
| 102.5° | 70.1 | 112.0 | 585.6 | 776.1 | 638.8 |
| 105° | 86.8 | 123.3 | 546.4 | 921.8 | 857.3 |



TEST NUMBER: P845253

CATALOG NUMBER: SQ4P-PW1-075U-050D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 134.5 | 165.3 | 425.9 | 927.4 | 1056.3 |
| 115° | 151.3 | 182.1 | 406.2 | 857.3 | 1011.4 |
| 117.5° | 168.1 | 201.8 | 395.1 | 792.9 | 947.0 |
| 120° | 182.1 | 218.5 | 386.7 | 731.3 | 882.5 |
| 122.5° | 193.3 | 235.4 | 381.0 | 680.9 | 818.1 |
| 125° | 204.6 | 252.2 | 378.2 | 638.8 | 762.1 |
| 127.5° | 215.7 | 263.4 | 378.2 | 608.0 | 711.7 |
| 130° | 227.0 | 269.0 | 375.4 | 577.2 | 669.6 |
| 132.5° | 238.1 | 271.7 | 375.4 | 554.8 | 633.2 |
| 135° | 246.5 | 277.3 | 375.4 | 532.3 | 602.4 |
| 137.5° | 257.8 | 283.0 | 375.4 | 512.7 | 577.2 |
| 140° | 266.2 | 291.4 | 375.4 | 493.1 | 549.2 |
| 142.5° | 277.3 | 299.8 | 375.4 | 473.5 | 523.9 |
| 145° | 288.6 | 308.2 | 372.6 | 459.5 | 498.7 |
| 147.5° | 299.8 | 316.6 | 369.8 | 445.5 | 476.3 |
| 150° | 308.2 | 325.0 | 369.8 | 431.4 | 456.7 |
| 152.5° | 319.4 | 333.4 | 367.0 | 417.5 | 439.9 |
| 155° | 327.8 | 339.0 | 367.0 | 409.0 | 423.1 |
| 157.5° | 336.2 | 347.4 | 367.0 | 400.6 | 411.9 |
| 160° | 344.6 | 353.0 | 369.8 | 395.1 | 403.4 |
| 162.5° | 353.0 | 358.7 | 369.8 | 389.5 | 395.1 |
| 165° | 358.7 | 361.5 | 369.8 | 386.7 | 389.5 |
| 167.5° | 364.3 | 367.0 | 369.8 | 383.8 | 383.8 |
| 170° | 367.0 | 369.8 | 372.6 | 381.0 | 381.0 |
| 172.5° | 372.6 | 372.6 | 372.6 | 378.2 | 378.2 |
| 175° | 375.4 | 375.4 | 372.6 | 378.2 | 375.4 |
| 177.5° | 375.4 | 375.4 | 372.6 | 378.2 | 375.4 |
| 180° | 375.4 | 375.4 | 375.4 | 375.4 | 375.4 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|--------|
| 107.5° | 103.7 | 137.3 | 495.9 | 986.2 | 997.5 |
| 110° | 117.6 | 151.3 | 456.7 | 977.8 | 1059.1 |



(END OF REPORT)