

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: P845157

Luminaire Tested: **SQ4P-PR1-050U-050D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845157
REPORT IS A COMBINATION OF REPORTS P700203 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-050U-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

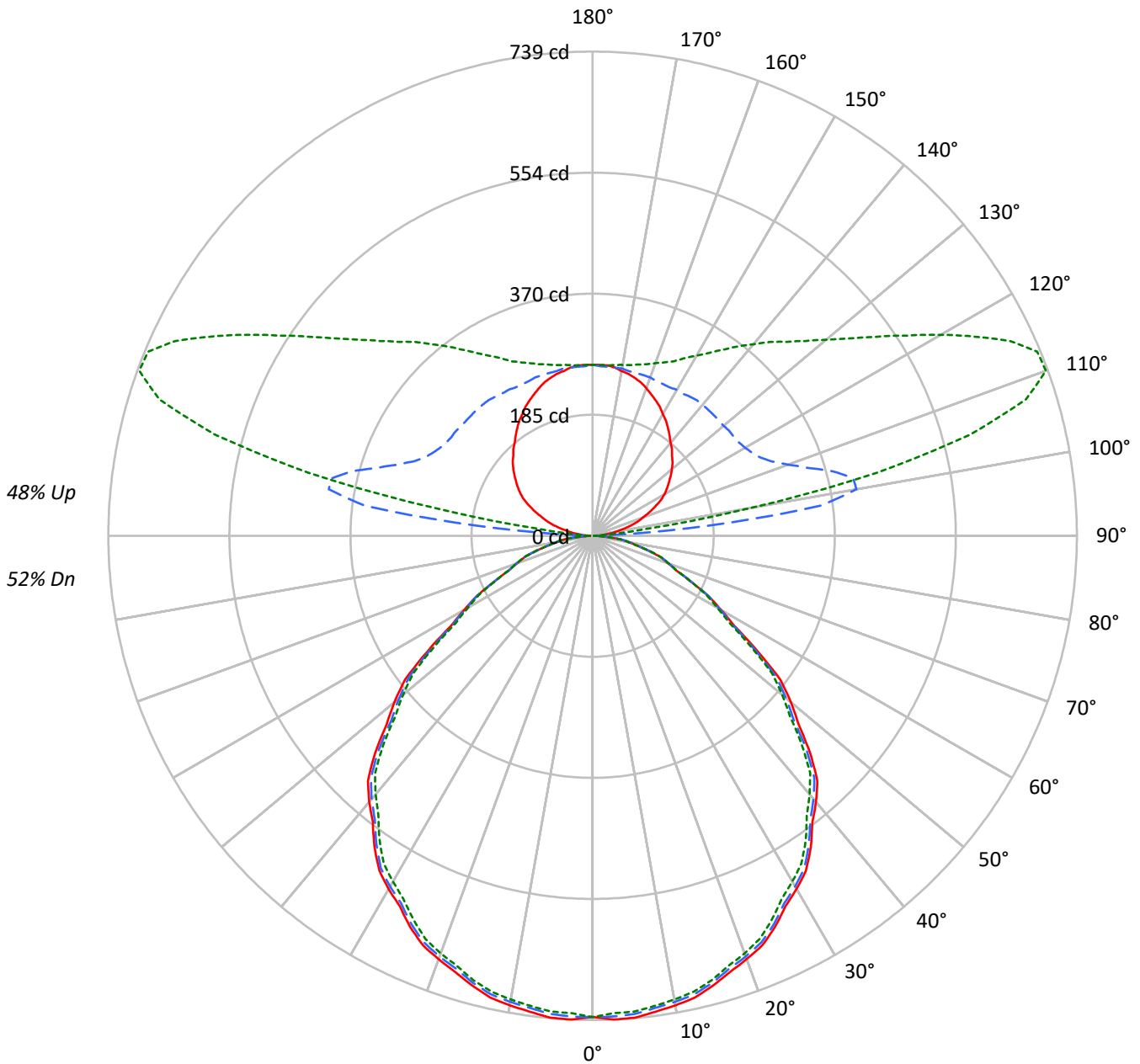
Lumens per Lamp: N/A
Luminaire Lumens: 3530.6 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29.8
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: P845157

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Luminous Intensity Polar Plot





TEST NUMBER: P845157

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 84 | 84 | 84 | 71 | 71 | 71 | 58 | 58 | 58 | 52 | | | | | | | | | | | | | | | | | | | |
| 1 | 99 | 94 | 91 | 87 | 91 | 87 | 84 | 81 | 74 | 72 | 70 | 63 | 61 | 59 | 52 | 51 | 50 | 44 | | | | | | | | | | | | | | | | | | | |
| 2 | 90 | 83 | 77 | 72 | 83 | 77 | 72 | 67 | 66 | 62 | 58 | 55 | 53 | 50 | 46 | 44 | 42 | 38 | | | | | | | | | | | | | | | | | | | |
| 3 | 82 | 73 | 66 | 60 | 76 | 68 | 62 | 56 | 58 | 53 | 49 | 49 | 46 | 43 | 41 | 38 | 36 | 32 | | | | | | | | | | | | | | | | | | | |
| 4 | 75 | 65 | 57 | 51 | 70 | 60 | 53 | 48 | 52 | 47 | 42 | 44 | 40 | 37 | 37 | 34 | 31 | 28 | | | | | | | | | | | | | | | | | | | |
| 5 | 69 | 58 | 50 | 44 | 64 | 54 | 47 | 41 | 46 | 41 | 37 | 40 | 35 | 32 | 33 | 30 | 28 | 24 | | | | | | | | | | | | | | | | | | | |
| 6 | 64 | 52 | 44 | 38 | 59 | 48 | 41 | 36 | 42 | 36 | 32 | 36 | 31 | 28 | 30 | 27 | 24 | 21 | | | | | | | | | | | | | | | | | | | |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 37 | 32 | 38 | 32 | 28 | 33 | 28 | 25 | 28 | 24 | 22 | 19 | | | | | | | | | | | | | | | | | | | |
| 8 | 55 | 43 | 35 | 30 | 51 | 40 | 33 | 28 | 35 | 29 | 25 | 30 | 26 | 22 | 25 | 22 | 19 | 17 | | | | | | | | | | | | | | | | | | | |
| 9 | 51 | 39 | 31 | 26 | 47 | 37 | 30 | 25 | 32 | 26 | 23 | 28 | 23 | 20 | 23 | 20 | 18 | 15 | | | | | | | | | | | | | | | | | | | |
| 10 | 48 | 36 | 29 | 24 | 44 | 34 | 27 | 23 | 29 | 24 | 20 | 25 | 21 | 18 | 22 | 18 | 16 | 14 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6777 | 6777 | 6777 |
| 5° | 6839 | 6786 | 6751 |
| 10° | 6817 | 6769 | 6734 |
| 15° | 6787 | 6744 | 6708 |
| 20° | 6752 | 6709 | 6659 |
| 25° | 6706 | 6661 | 6583 |
| 30° | 6632 | 6586 | 6491 |
| 35° | 6536 | 6477 | 6385 |
| 40° | 6386 | 6317 | 6204 |
| 45° | 6126 | 6019 | 5895 |
| 50° | 5667 | 5530 | 5421 |
| 55° | 4946 | 4835 | 4734 |
| 60° | 4168 | 4133 | 4052 |
| 65° | 3604 | 3620 | 3589 |
| 70° | 3310 | 3329 | 3329 |
| 75° | 3183 | 3183 | 3201 |
| 80° | 2991 | 3029 | 2991 |
| 85° | 2414 | 2678 | 2678 |



TEST NUMBER: P845157

CATALOG NUMBER: SQ4P-PR1-050U-050D-B40-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 69.5 | 2.0 |
| 10°-20° | 198.8 | 5.6 |
| 20°-30° | 299.8 | 8.5 |
| 30°-40° | 357.2 | 10.1 |
| 40°-50° | 352.1 | 10.0 |
| 50°-60° | 269.1 | 7.6 |
| 60°-70° | 166.5 | 4.7 |
| 70°-80° | 94.6 | 2.7 |
| 80°-90° | 29.4 | 0.8 |
| 90°-100° | 103.8 | 2.9 |
| 100°-110° | 361.4 | 10.2 |
| 110°-120° | 350.0 | 9.9 |
| 120°-130° | 274.6 | 7.8 |
| 130°-140° | 217.3 | 6.2 |
| 140°-150° | 167.7 | 4.8 |
| 150°-160° | 120.2 | 3.4 |
| 160°-170° | 73.5 | 2.1 |
| 170°-180° | 24.9 | 0.7 |
| 0°-30° | 568.0 | 16.1 |
| 0°-40° | 925.2 | 26.2 |
| 0°-60° | 1546.5 | 43.8 |
| 0°-90° | 1837.1 | 52.0 |
| 90°-120° | 815.2 | 23.1 |
| 90°-150° | 1474.9 | 41.8 |
| 90°-180° | 1694.0 | 48.0 |
| 0°-180° | 3530.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 734 | 734 | 734 | 734 | 734 | |
| 5° | 738 | 730 | 733 | 730 | 729 | 70 |
| 15° | 711 | 703 | 706 | 704 | 702 | 201 |
| 25° | 659 | 650 | 654 | 647 | 647 | 303 |
| 35° | 580 | 573 | 575 | 568 | 567 | 362 |
| 45° | 470 | 463 | 461 | 453 | 452 | 360 |
| 55° | 308 | 302 | 301 | 296 | 294 | 276 |
| 65° | 165 | 164 | 166 | 164 | 164 | 167 |
| 75° | 89 | 89 | 89 | 90 | 90 | 94 |
| 85° | 23 | 24 | 25 | 25 | 25 | 26 |
| 90° | 4 | 6 | 6 | 4 | 2 | 3 |
| 95° | 18 | 60 | 175 | 45 | 27 | 19 |
| 105° | 60 | 86 | 380 | 641 | 596 | 63 |
| 115° | 105 | 127 | 282 | 596 | 703 | 104 |
| 125° | 142 | 175 | 263 | 444 | 530 | 127 |
| 135° | 171 | 193 | 261 | 370 | 419 | 133 |
| 145° | 201 | 214 | 259 | 319 | 347 | 125 |
| 155° | 228 | 236 | 255 | 284 | 294 | 105 |
| 165° | 249 | 251 | 257 | 269 | 271 | 70 |
| 175° | 261 | 261 | 259 | 263 | 261 | 25 |
| 180° | 261 | 261 | 261 | 261 | 261 | |



TEST NUMBER: P845157

CATALOG NUMBER: SQ4P-PR1-050U-050D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 734.5 | 734.5 | 734.5 | 734.5 | 734.5 |
| 2.5° | 739.1 | 732.7 | 734.5 | 733.0 | 729.5 |
| 5° | 738.4 | 730.3 | 732.7 | 730.1 | 728.9 |
| 7.5° | 732.7 | 724.8 | 727.2 | 724.6 | 723.9 |
| 10° | 727.6 | 720.2 | 722.5 | 720.0 | 718.8 |
| 12.5° | 722.0 | 714.2 | 717.0 | 713.9 | 712.7 |
| 15° | 710.6 | 703.2 | 706.1 | 703.5 | 702.3 |
| 17.5° | 697.9 | 690.0 | 693.0 | 690.1 | 688.4 |
| 20° | 687.7 | 680.4 | 683.3 | 678.9 | 678.2 |
| 22.5° | 676.6 | 669.2 | 672.1 | 666.3 | 666.1 |
| 25° | 658.7 | 650.5 | 654.3 | 647.3 | 646.7 |
| 27.5° | 637.3 | 629.9 | 632.8 | 625.7 | 625.0 |
| 30° | 622.5 | 615.2 | 618.2 | 610.5 | 609.3 |
| 32.5° | 605.9 | 599.0 | 601.5 | 593.8 | 593.1 |
| 35° | 580.3 | 573.4 | 575.1 | 567.6 | 566.9 |
| 37.5° | 551.0 | 544.8 | 545.8 | 537.3 | 536.9 |
| 40° | 530.2 | 524.1 | 524.5 | 515.6 | 515.1 |
| 42.5° | 507.5 | 501.3 | 500.7 | 491.9 | 491.2 |
| 45° | 469.5 | 463.3 | 461.3 | 452.9 | 451.8 |
| 47.5° | 426.2 | 420.0 | 416.2 | 409.4 | 408.6 |
| 50° | 394.8 | 388.6 | 385.3 | 379.6 | 377.7 |
| 52.5° | 360.9 | 354.7 | 352.0 | 346.7 | 344.9 |
| 55° | 307.5 | 302.5 | 300.6 | 295.5 | 294.3 |
| 57.5° | 256.7 | 253.5 | 252.8 | 247.9 | 247.4 |
| 60° | 225.9 | 224.0 | 224.0 | 219.6 | 219.6 |
| 62.5° | 199.6 | 198.2 | 199.1 | 196.2 | 195.8 |
| 65° | 165.1 | 164.0 | 165.8 | 164.4 | 164.4 |
| 67.5° | 138.0 | 138.0 | 139.1 | 138.5 | 138.5 |
| 70° | 122.7 | 122.7 | 123.4 | 123.4 | 123.4 |
| 72.5° | 109.0 | 108.6 | 110.3 | 110.2 | 109.7 |
| 75° | 89.3 | 89.3 | 89.3 | 89.8 | 89.8 |
| 77.5° | 69.5 | 69.6 | 70.2 | 70.1 | 69.5 |
| 80° | 56.3 | 57.0 | 57.0 | 56.3 | 56.3 |
| 82.5° | 43.2 | 43.7 | 43.7 | 43.6 | 43.2 |
| 85° | 22.8 | 24.0 | 25.3 | 25.3 | 25.3 |
| 87.5° | 6.6 | 8.5 | 10.2 | 10.2 | 9.6 |
| 90° | 3.9 | 5.8 | 5.8 | 3.9 | 1.9 |
| 92.5° | 9.7 | 29.2 | 27.2 | 11.7 | 9.7 |
| 95° | 17.5 | 60.4 | 175.3 | 44.8 | 27.2 |
| 97.5° | 27.2 | 68.1 | 350.5 | 159.7 | 85.7 |
| 100° | 37.0 | 72.1 | 408.9 | 383.7 | 247.3 |
| 102.5° | 48.6 | 77.9 | 407.0 | 539.4 | 444.0 |
| 105° | 60.4 | 85.7 | 379.8 | 640.6 | 595.9 |



TEST NUMBER: P845157

CATALOG NUMBER: SQ4P-PR1-050U-050D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 93.5 | 114.9 | 296.0 | 644.6 | 734.2 |
| 115° | 105.1 | 126.6 | 282.4 | 595.9 | 703.0 |
| 117.5° | 116.9 | 140.2 | 274.5 | 551.1 | 658.2 |
| 120° | 126.6 | 151.9 | 268.7 | 508.3 | 613.4 |
| 122.5° | 134.4 | 163.6 | 264.8 | 473.2 | 568.6 |
| 125° | 142.2 | 175.3 | 262.9 | 444.0 | 529.7 |
| 127.5° | 149.9 | 183.1 | 262.9 | 422.6 | 494.6 |
| 130° | 157.8 | 186.9 | 261.0 | 401.2 | 465.4 |
| 132.5° | 165.5 | 188.9 | 261.0 | 385.6 | 440.1 |
| 135° | 171.3 | 192.7 | 261.0 | 370.0 | 418.7 |
| 137.5° | 179.2 | 196.7 | 261.0 | 356.3 | 401.2 |
| 140° | 185.0 | 202.5 | 261.0 | 342.8 | 381.7 |
| 142.5° | 192.7 | 208.3 | 261.0 | 329.1 | 364.2 |
| 145° | 200.6 | 214.3 | 259.0 | 319.4 | 346.6 |
| 147.5° | 208.3 | 220.1 | 257.1 | 309.6 | 331.0 |
| 150° | 214.3 | 225.9 | 257.1 | 299.9 | 317.5 |
| 152.5° | 222.0 | 231.7 | 255.2 | 290.1 | 305.7 |
| 155° | 227.8 | 235.7 | 255.2 | 284.3 | 294.0 |
| 157.5° | 233.6 | 241.5 | 255.2 | 278.5 | 286.3 |
| 160° | 239.6 | 245.4 | 257.1 | 274.5 | 280.4 |
| 162.5° | 245.4 | 249.2 | 257.1 | 270.7 | 274.5 |
| 165° | 249.2 | 251.2 | 257.1 | 268.7 | 270.7 |
| 167.5° | 253.1 | 255.2 | 257.1 | 266.8 | 266.8 |
| 170° | 255.2 | 257.1 | 259.0 | 264.8 | 264.8 |
| 172.5° | 259.0 | 259.0 | 259.0 | 262.9 | 262.9 |
| 175° | 261.0 | 261.0 | 259.0 | 262.9 | 261.0 |
| 177.5° | 261.0 | 261.0 | 259.0 | 262.9 | 261.0 |
| 180° | 261.0 | 261.0 | 261.0 | 261.0 | 261.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|-------|-------|-------|-------|
| 107.5° | 72.1 | 95.5 | 344.7 | 685.5 | 693.3 |
| 110° | 81.8 | 105.1 | 317.5 | 679.6 | 736.1 |



(END OF REPORT)