

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: P844846

Luminaire Tested: **SQ4P-BB-0U-050D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844846
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P518604)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-0U-050D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

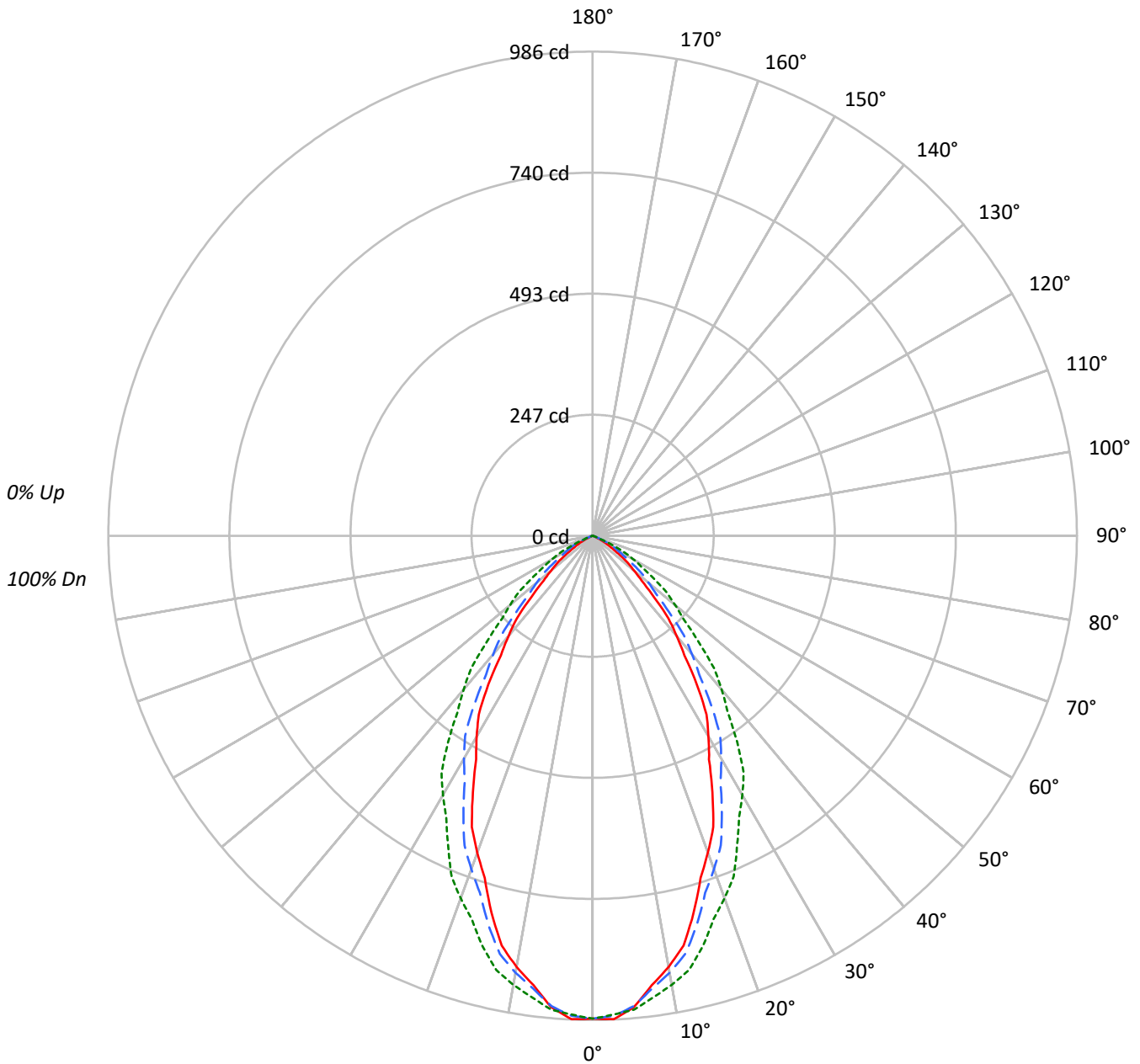
Lumens per Lamp: N/A
Luminaire Lumens: 1172.9 lumens
Efficiency: N/A
Efficacy: 69.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.8
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: P844846

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Luminous Intensity Polar Plot





TEST NUMBER: P844846

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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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | |
| 1 | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99 | 99 | 98 | 96 | 96 | 94 | 93 | 91 | | | |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 86 | 84 | 82 | | | |
| 3 | 99 | 91 | 85 | 81 | 97 | 90 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 77 | 82 | 79 | 76 | 74 | | | |
| 4 | 93 | 84 | 77 | 72 | 91 | 82 | 76 | 72 | 80 | 75 | 71 | 78 | 74 | 70 | 76 | 72 | 69 | 67 | | | |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 68 | 64 | 72 | 67 | 64 | 71 | 66 | 63 | 61 | | | |
| 6 | 82 | 71 | 64 | 59 | 80 | 70 | 64 | 59 | 69 | 63 | 58 | 67 | 62 | 58 | 66 | 61 | 58 | 56 | | | |
| 7 | 77 | 66 | 59 | 54 | 75 | 65 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 53 | 61 | 56 | 53 | 51 | | | |
| 8 | 72 | 61 | 54 | 50 | 71 | 61 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 47 | | | |
| 9 | 68 | 57 | 50 | 46 | 67 | 57 | 50 | 46 | 56 | 50 | 46 | 55 | 49 | 45 | 54 | 49 | 45 | 44 | | | |
| 10 | 65 | 54 | 47 | 42 | 63 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 51 | 46 | 42 | 41 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 9072 | 9072 | 9072 |
| 5° | 8925 | 8904 | 8970 |
| 10° | 8351 | 8464 | 8699 |
| 15° | 7592 | 7833 | 8270 |
| 20° | 6739 | 7090 | 7710 |
| 25° | 5869 | 6333 | 7084 |
| 30° | 5027 | 5579 | 6491 |
| 35° | 4168 | 4736 | 5776 |
| 40° | 3202 | 3788 | 4921 |
| 45° | 2316 | 2868 | 3960 |
| 50° | 1577 | 2136 | 3142 |
| 55° | 1026 | 1546 | 2442 |
| 60° | 589 | 1089 | 1766 |
| 65° | 155 | 666 | 893 |
| 70° | 81 | 205 | 256 |
| 75° | 36 | 18 | 0 |
| 80° | 27 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 89.7 | 7.7 |
| 10°-20° | 229.5 | 19.6 |
| 20°-30° | 287.3 | 24.5 |
| 30°-40° | 265.3 | 22.6 |
| 40°-50° | 178.3 | 15.2 |
| 50°-60° | 92.1 | 7.9 |
| 60°-70° | 28.8 | 2.5 |
| 70°-80° | 1.8 | 0.2 |
| 80°-90° | 0.0 | 0.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 606.5 | 51.7 |
| 0°-40° | 871.8 | 74.3 |
| 0°-60° | 1142.2 | 97.4 |
| 0°-90° | 1172.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1172.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 983 | 983 | 983 | 983 | 983 | |
| 5° | 964 | 954 | 961 | 965 | 968 | 89 |
| 15° | 795 | 792 | 820 | 848 | 866 | 221 |
| 25° | 576 | 581 | 622 | 665 | 696 | 264 |
| 35° | 370 | 379 | 420 | 470 | 513 | 229 |
| 45° | 178 | 188 | 220 | 263 | 304 | 139 |
| 55° | 64 | 74 | 96 | 123 | 152 | 60 |
| 65° | 7 | 14 | 30 | 37 | 41 | 12 |
| 75° | 1 | 1 | 0 | 0 | 0 | 1 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P844846

CATALOG NUMBER: SQ4P-BB-OU-050D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 983.3 | 983.3 | 983.3 | 983.3 | 983.3 |
| 2.5° | 985.5 | 976.2 | 978.6 | 978.6 | 976.0 |
| 5° | 963.7 | 953.9 | 961.4 | 964.7 | 968.5 |
| 7.5° | 923.1 | 915.4 | 929.7 | 940.1 | 947.9 |
| 10° | 891.4 | 884.9 | 903.4 | 917.8 | 928.5 |
| 12.5° | 854.8 | 849.8 | 872.1 | 892.0 | 905.7 |
| 15° | 794.8 | 792.1 | 820.1 | 847.6 | 865.8 |
| 17.5° | 730.6 | 730.5 | 762.4 | 796.7 | 818.5 |
| 20° | 686.4 | 687.8 | 722.1 | 759.8 | 785.3 |
| 22.5° | 642.2 | 645.5 | 682.1 | 721.4 | 750.8 |
| 25° | 576.5 | 581.1 | 622.1 | 664.8 | 695.9 |
| 27.5° | 513.3 | 520.2 | 563.3 | 607.5 | 645.5 |
| 30° | 471.9 | 479.8 | 523.7 | 570.3 | 609.3 |
| 32.5° | 431.1 | 440.6 | 483.3 | 532.7 | 572.4 |
| 35° | 370.1 | 379.4 | 420.5 | 470.0 | 512.8 |
| 37.5° | 307.0 | 316.1 | 356.2 | 405.0 | 451.3 |
| 40° | 265.9 | 276.1 | 314.5 | 361.7 | 408.6 |
| 42.5° | 228.7 | 238.9 | 274.8 | 321.2 | 365.6 |
| 45° | 177.5 | 188.1 | 219.8 | 262.6 | 303.5 |
| 47.5° | 135.1 | 146.6 | 174.3 | 213.2 | 250.4 |
| 50° | 109.9 | 121.5 | 148.8 | 183.0 | 218.9 |
| 52.5° | 89.7 | 101.0 | 125.7 | 157.8 | 190.6 |
| 55° | 63.8 | 74.4 | 96.1 | 123.4 | 151.8 |
| 57.5° | 44.1 | 53.3 | 72.7 | 95.4 | 117.7 |
| 60° | 31.9 | 40.7 | 59.0 | 77.4 | 95.7 |
| 62.5° | 21.2 | 29.3 | 47.1 | 61.4 | 73.6 |
| 65° | 7.1 | 13.7 | 30.5 | 36.7 | 40.9 |
| 67.5° | 3.6 | 4.3 | 15.9 | 16.9 | 18.3 |
| 70° | 3.0 | 3.0 | 7.6 | 8.1 | 9.5 |
| 72.5° | 2.0 | 2.0 | 3.0 | 3.9 | 4.2 |
| 75° | 1.0 | 1.0 | 0.5 | 0.0 | 0.0 |
| 77.5° | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 |
| 80° | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







(END OF REPORT)