

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: P518604

Luminaire Tested: **SQ4-BB-0U-050D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518604
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-0U-050D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

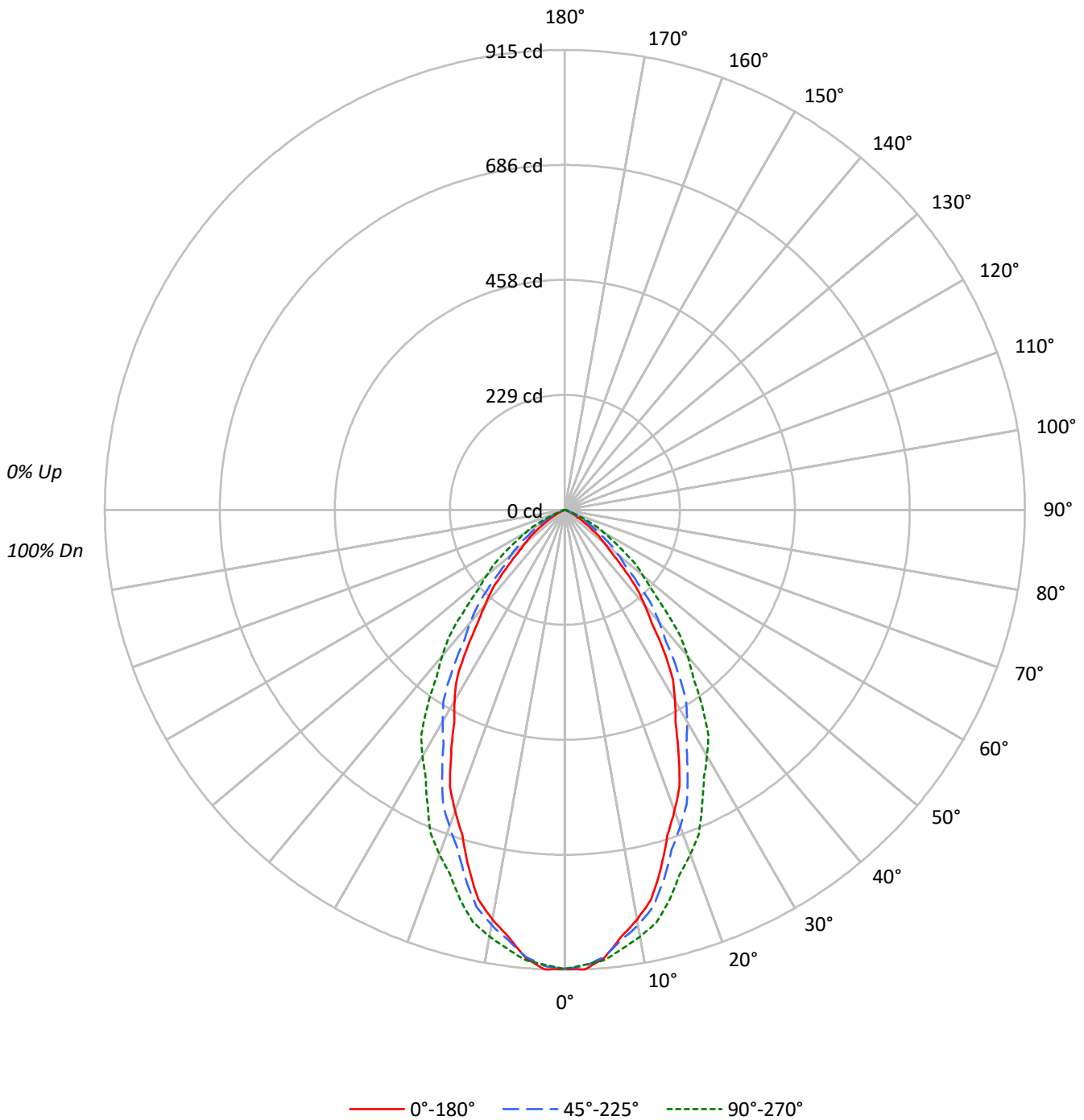
Lumens per Lamp: N/A
Luminaire Lumens: 1089.1 lumens
Efficiency: N/A
Efficacy: 67.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
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 | 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 | 83 | 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° | 8424 | 8424 | 8424 |
| 5° | 8288 | 8268 | 8329 |
| 10° | 7754 | 7858 | 8078 |
| 15° | 7050 | 7274 | 7679 |
| 20° | 6258 | 6583 | 7160 |
| 25° | 5449 | 5881 | 6578 |
| 30° | 4668 | 5181 | 6028 |
| 35° | 3870 | 4398 | 5362 |
| 40° | 2974 | 3517 | 4569 |
| 45° | 2150 | 2663 | 3677 |
| 50° | 1464 | 1984 | 2917 |
| 55° | 952 | 1435 | 2266 |
| 60° | 546 | 1011 | 1639 |
| 65° | 144 | 618 | 830 |
| 70° | 73 | 192 | 237 |
| 75° | 32 | 14 | 0 |
| 80° | 21 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 83.3 | 7.7 |
| 10°-20° | 213.1 | 19.6 |
| 20°-30° | 266.7 | 24.5 |
| 30°-40° | 246.4 | 22.6 |
| 40°-50° | 165.6 | 15.2 |
| 50°-60° | 85.5 | 7.9 |
| 60°-70° | 26.8 | 2.5 |
| 70°-80° | 1.7 | 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° | 563.1 | 51.7 |
| 0°-40° | 809.5 | 74.3 |
| 0°-60° | 1060.6 | 97.4 |
| 0°-90° | 1089.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1089.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 913 | 913 | 913 | 913 | 913 | |
| 5° | 895 | 886 | 893 | 896 | 899 | 83 |
| 15° | 738 | 736 | 762 | 787 | 804 | 206 |
| 25° | 535 | 540 | 578 | 617 | 646 | 245 |
| 35° | 344 | 352 | 390 | 436 | 476 | 213 |
| 45° | 165 | 175 | 204 | 244 | 282 | 129 |
| 55° | 59 | 69 | 89 | 115 | 141 | 55 |
| 65° | 7 | 13 | 28 | 34 | 38 | 11 |
| 75° | 1 | 1 | 0 | 0 | 0 | 1 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 913.0 | 913.0 | 913.0 | 913.0 | 913.0 |
| 2.5° | 915.1 | 906.5 | 908.7 | 908.7 | 906.3 |
| 5° | 894.9 | 885.8 | 892.7 | 895.8 | 899.3 |
| 7.5° | 857.1 | 850.0 | 863.2 | 873.0 | 880.2 |
| 10° | 827.7 | 821.7 | 838.8 | 852.2 | 862.2 |
| 12.5° | 793.8 | 789.1 | 809.8 | 828.3 | 841.0 |
| 15° | 738.1 | 735.5 | 761.5 | 787.0 | 803.9 |
| 17.5° | 678.4 | 678.3 | 707.9 | 739.7 | 760.0 |
| 20° | 637.4 | 638.7 | 670.5 | 705.5 | 729.2 |
| 22.5° | 596.4 | 599.4 | 633.4 | 669.9 | 697.1 |
| 25° | 535.3 | 539.6 | 577.7 | 617.3 | 646.2 |
| 27.5° | 476.7 | 483.0 | 523.1 | 564.1 | 599.4 |
| 30° | 438.2 | 445.5 | 486.3 | 529.5 | 565.8 |
| 32.5° | 400.3 | 409.1 | 448.8 | 494.6 | 531.5 |
| 35° | 343.6 | 352.3 | 390.5 | 436.4 | 476.1 |
| 37.5° | 285.1 | 293.5 | 330.8 | 376.1 | 419.0 |
| 40° | 246.9 | 256.4 | 292.0 | 335.8 | 379.4 |
| 42.5° | 212.3 | 221.8 | 255.2 | 298.3 | 339.5 |
| 45° | 164.8 | 174.7 | 204.1 | 243.8 | 281.8 |
| 47.5° | 125.4 | 136.1 | 161.9 | 197.9 | 232.5 |
| 50° | 102.0 | 112.8 | 138.2 | 169.9 | 203.2 |
| 52.5° | 83.3 | 93.8 | 116.7 | 146.5 | 177.0 |
| 55° | 59.2 | 69.1 | 89.2 | 114.6 | 140.9 |
| 57.5° | 40.9 | 49.5 | 67.5 | 88.6 | 109.3 |
| 60° | 29.6 | 37.8 | 54.8 | 71.9 | 88.8 |
| 62.5° | 19.7 | 27.2 | 43.8 | 57.0 | 68.3 |
| 65° | 6.6 | 12.7 | 28.3 | 34.1 | 38.0 |
| 67.5° | 3.4 | 4.0 | 14.8 | 15.7 | 17.0 |
| 70° | 2.7 | 2.7 | 7.1 | 7.5 | 8.8 |
| 72.5° | 1.9 | 1.9 | 2.8 | 3.6 | 3.9 |
| 75° | 0.9 | 0.9 | 0.4 | 0.0 | 0.0 |
| 77.5° | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 |
| 80° | 0.4 | 0.4 | 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 |

(END OF REPORT)