

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: P521170

Luminaire Tested: **SQ4-BB-0U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521170
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-0U-100D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

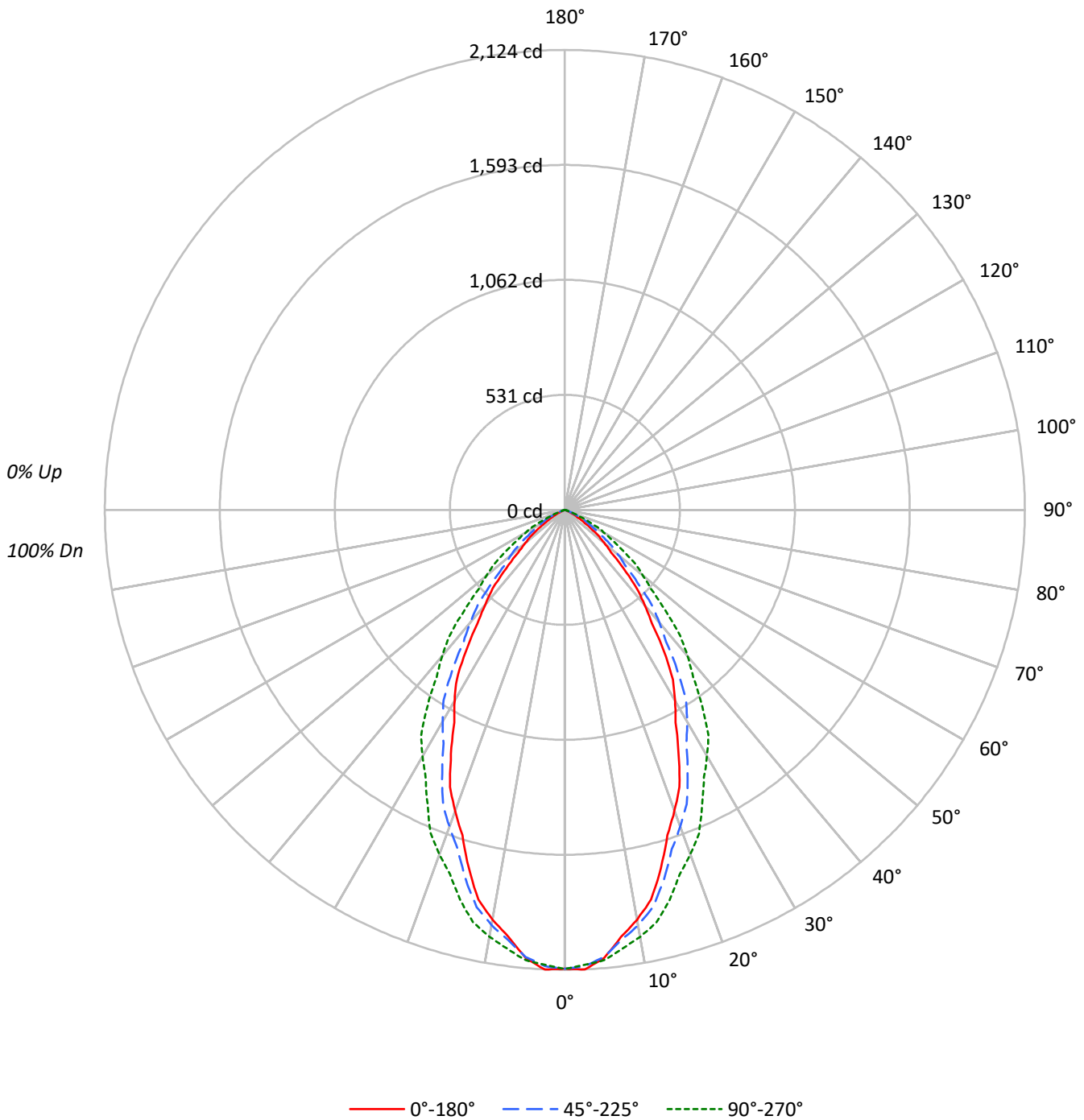
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2528.4 lumens
Efficiency: N/A
Efficacy: 59.6 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): 42.4
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





TEST NUMBER: P521170

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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 | | | | 100 |
| 1 | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99 | 99 | 98 | 96 | 96 | 94 | 93 | 91 | | | | 91 |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 86 | 84 | 82 | | | | 82 |
| 3 | 99 | 91 | 85 | 81 | 97 | 90 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 77 | 82 | 79 | 76 | 74 | | | | 74 |
| 4 | 93 | 84 | 77 | 72 | 91 | 83 | 76 | 72 | 80 | 75 | 71 | 78 | 74 | 70 | 76 | 72 | 69 | 67 | | | | 67 |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 68 | 64 | 72 | 67 | 64 | 71 | 66 | 63 | 61 | | | | 61 |
| 6 | 82 | 71 | 64 | 59 | 80 | 70 | 64 | 59 | 69 | 63 | 58 | 67 | 62 | 58 | 66 | 61 | 58 | 56 | | | | 56 |
| 7 | 77 | 66 | 59 | 54 | 75 | 65 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 53 | 61 | 56 | 53 | 51 | | | | 51 |
| 8 | 72 | 61 | 54 | 50 | 71 | 61 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 47 | | | | 47 |
| 9 | 68 | 57 | 50 | 46 | 67 | 57 | 50 | 46 | 56 | 50 | 46 | 55 | 49 | 45 | 54 | 49 | 45 | 44 | | | | 44 |
| 10 | 65 | 54 | 47 | 42 | 63 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 51 | 46 | 42 | 41 | | | | 41 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 19555 | 19555 | 19555 |
| 5° | 19241 | 19192 | 19335 |
| 10° | 18003 | 18242 | 18752 |
| 15° | 16367 | 16885 | 17825 |
| 20° | 14528 | 15283 | 16621 |
| 25° | 12652 | 13653 | 15272 |
| 30° | 10837 | 12028 | 13993 |
| 35° | 8986 | 10210 | 12450 |
| 40° | 6904 | 8163 | 10608 |
| 45° | 4991 | 6181 | 8536 |
| 50° | 3400 | 4607 | 6771 |
| 55° | 2210 | 3331 | 5262 |
| 60° | 1268 | 2347 | 3803 |
| 65° | 336 | 1432 | 1925 |
| 70° | 167 | 442 | 553 |
| 75° | 75 | 36 | 0 |
| 80° | 53 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 193.4 | 7.7 |
| 10°-20° | 494.7 | 19.6 |
| 20°-30° | 619.3 | 24.5 |
| 30°-40° | 572.0 | 22.6 |
| 40°-50° | 384.4 | 15.2 |
| 50°-60° | 198.5 | 7.9 |
| 60°-70° | 62.2 | 2.5 |
| 70°-80° | 3.9 | 0.2 |
| 80°-90° | 0.1 | 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° | 1307.3 | 51.7 |
| 0°-40° | 1879.3 | 74.3 |
| 0°-60° | 2462.2 | 97.4 |
| 0°-90° | 2528.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2528.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2120 | 2120 | 2120 | 2120 | 2120 | |
| 5° | 2078 | 2056 | 2072 | 2080 | 2088 | 193 |
| 15° | 1714 | 1707 | 1768 | 1827 | 1866 | 477 |
| 25° | 1243 | 1253 | 1341 | 1433 | 1500 | 570 |
| 35° | 798 | 818 | 906 | 1013 | 1105 | 494 |
| 45° | 382 | 406 | 474 | 566 | 654 | 300 |
| 55° | 137 | 160 | 207 | 266 | 327 | 128 |
| 65° | 15 | 29 | 66 | 79 | 88 | 26 |
| 75° | 2 | 2 | 1 | 0 | 0 | 3 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



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CATALOG NUMBER: SQ4-BB-0U-100D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2119.5 | 2119.5 | 2119.5 | 2119.5 | 2119.5 |
| 2.5° | 2124.4 | 2104.4 | 2109.7 | 2109.5 | 2103.9 |
| 5° | 2077.5 | 2056.4 | 2072.3 | 2079.7 | 2087.7 |
| 7.5° | 1989.7 | 1973.3 | 2003.8 | 2026.8 | 2043.4 |
| 10° | 1921.6 | 1907.6 | 1947.2 | 1978.5 | 2001.6 |
| 12.5° | 1842.9 | 1832.0 | 1880.0 | 1922.9 | 1952.4 |
| 15° | 1713.5 | 1707.4 | 1767.8 | 1827.1 | 1866.2 |
| 17.5° | 1574.8 | 1574.6 | 1643.5 | 1717.2 | 1764.3 |
| 20° | 1479.7 | 1482.7 | 1556.6 | 1637.8 | 1692.9 |
| 22.5° | 1384.5 | 1391.5 | 1470.4 | 1555.1 | 1618.3 |
| 25° | 1242.8 | 1252.8 | 1341.2 | 1433.0 | 1500.2 |
| 27.5° | 1106.6 | 1121.3 | 1214.3 | 1309.7 | 1391.5 |
| 30° | 1017.2 | 1034.2 | 1129.0 | 1229.3 | 1313.5 |
| 32.5° | 929.4 | 949.7 | 1042.0 | 1148.1 | 1234.0 |
| 35° | 797.8 | 817.8 | 906.5 | 1013.1 | 1105.4 |
| 37.5° | 661.8 | 681.4 | 768.0 | 873.0 | 972.7 |
| 40° | 573.2 | 595.3 | 677.8 | 779.6 | 880.8 |
| 42.5° | 492.8 | 514.9 | 592.5 | 692.5 | 788.1 |
| 45° | 382.5 | 405.5 | 473.7 | 566.0 | 654.2 |
| 47.5° | 291.0 | 316.1 | 375.9 | 459.4 | 539.8 |
| 50° | 236.9 | 261.9 | 321.0 | 394.5 | 471.7 |
| 52.5° | 193.4 | 217.7 | 270.9 | 340.2 | 411.0 |
| 55° | 137.4 | 160.5 | 207.1 | 265.9 | 327.1 |
| 57.5° | 95.0 | 114.8 | 156.7 | 205.8 | 253.7 |
| 60° | 68.7 | 87.8 | 127.2 | 167.0 | 206.1 |
| 62.5° | 45.7 | 63.2 | 101.7 | 132.3 | 158.5 |
| 65° | 15.4 | 29.4 | 65.6 | 79.2 | 88.2 |
| 67.5° | 7.8 | 9.4 | 34.5 | 36.4 | 39.4 |
| 70° | 6.2 | 6.2 | 16.4 | 17.5 | 20.5 |
| 72.5° | 4.5 | 4.5 | 6.6 | 8.4 | 9.0 |
| 75° | 2.1 | 2.1 | 1.0 | 0.0 | 0.0 |
| 77.5° | 1.0 | 1.0 | 0.8 | 0.0 | 0.0 |
| 80° | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.2 | 0.2 | 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)