

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: P519552

Luminaire Tested: **SQ4-WB-150U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519552
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

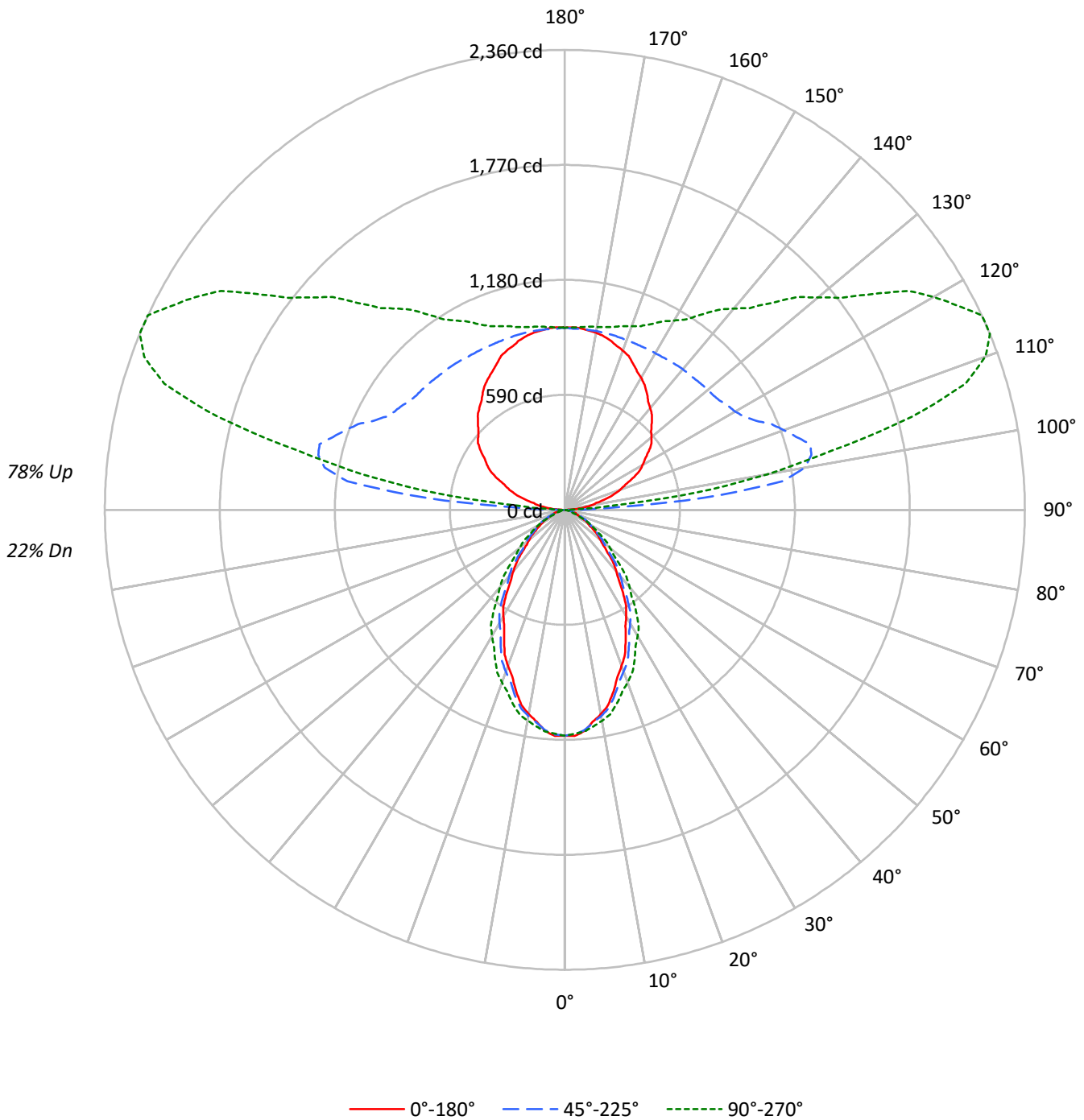
Lumens per Lamp: N/A
Luminaire Lumens: 7714.3 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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 | 100 | 100 | 100 | 100 | 89 | 89 | 89 | 89 | 68 | 68 | 68 | 48 | 48 | 48 | 30 | 30 | 30 | 22 |
| 1 | 92 | 88 | 84 | 81 | 81 | 78 | 75 | 73 | 60 | 58 | 56 | 43 | 42 | 41 | 27 | 27 | 26 | 19 |
| 2 | 84 | 77 | 72 | 67 | 74 | 69 | 64 | 60 | 53 | 50 | 47 | 38 | 37 | 35 | 25 | 24 | 23 | 17 |
| 3 | 77 | 68 | 62 | 56 | 68 | 61 | 56 | 51 | 47 | 43 | 40 | 34 | 32 | 30 | 22 | 21 | 20 | 15 |
| 4 | 71 | 61 | 54 | 48 | 63 | 54 | 48 | 44 | 42 | 38 | 35 | 31 | 28 | 26 | 20 | 19 | 18 | 13 |
| 5 | 65 | 54 | 47 | 41 | 57 | 49 | 42 | 38 | 38 | 34 | 30 | 28 | 25 | 23 | 19 | 17 | 16 | 12 |
| 6 | 60 | 49 | 41 | 36 | 53 | 44 | 37 | 33 | 34 | 30 | 26 | 25 | 23 | 20 | 17 | 16 | 14 | 11 |
| 7 | 55 | 44 | 37 | 32 | 49 | 40 | 33 | 29 | 31 | 27 | 23 | 23 | 20 | 18 | 16 | 14 | 13 | 10 |
| 8 | 51 | 40 | 33 | 28 | 46 | 36 | 30 | 25 | 28 | 24 | 21 | 21 | 18 | 16 | 15 | 13 | 12 | 9 |
| 9 | 48 | 36 | 29 | 25 | 42 | 33 | 27 | 23 | 26 | 22 | 19 | 20 | 17 | 15 | 14 | 12 | 11 | 8 |
| 10 | 45 | 33 | 27 | 22 | 40 | 30 | 24 | 20 | 24 | 20 | 17 | 18 | 15 | 13 | 13 | 11 | 10 | 8 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10689 | 10689 | 10689 |
| 5° | 10556 | 10518 | 10579 |
| 10° | 9974 | 10064 | 10297 |
| 15° | 9207 | 9421 | 9843 |
| 20° | 8360 | 8675 | 9249 |
| 25° | 7499 | 7908 | 8617 |
| 30° | 6705 | 7144 | 7961 |
| 35° | 5864 | 6287 | 7186 |
| 40° | 4936 | 5327 | 6221 |
| 45° | 4072 | 4425 | 5194 |
| 50° | 3400 | 3707 | 4328 |
| 55° | 2887 | 3182 | 3574 |
| 60° | 2467 | 2759 | 2851 |
| 65° | 1965 | 2321 | 1843 |
| 70° | 1743 | 1810 | 1125 |
| 75° | 1611 | 1469 | 688 |
| 80° | 1488 | 1350 | 595 |
| 85° | 1344 | 1239 | 487 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 106.3 | 1.4 |
| 10°-20° | 276.4 | 3.6 |
| 20°-30° | 358.0 | 4.6 |
| 30°-40° | 350.6 | 4.5 |
| 40°-50° | 268.4 | 3.5 |
| 50°-60° | 178.8 | 2.3 |
| 60°-70° | 97.6 | 1.3 |
| 70°-80° | 40.7 | 0.5 |
| 80°-90° | 13.5 | 0.2 |
| 90°-100° | 434.2 | 5.6 |
| 100°-110° | 1174.0 | 15.2 |
| 110°-120° | 1234.3 | 16.0 |
| 120°-130° | 1002.6 | 13.0 |
| 130°-140° | 786.5 | 10.2 |
| 140°-150° | 603.6 | 7.8 |
| 150°-160° | 434.1 | 5.6 |
| 160°-170° | 265.2 | 3.4 |
| 170°-180° | 89.4 | 1.2 |
| 0°-30° | 740.7 | 9.6 |
| 0°-40° | 1091.3 | 14.1 |
| 0°-60° | 1538.6 | 19.9 |
| 0°-90° | 1690.3 | 21.9 |
| 90°-120° | 2842.6 | 36.8 |
| 90°-150° | 5235.3 | 67.9 |
| 90°-180° | 6024.0 | 78.1 |
| 0°-180° | 7714.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1159 | 1159 | 1159 | 1159 | 1159 | |
| 5° | 1140 | 1128 | 1136 | 1138 | 1142 | 106 |
| 15° | 964 | 960 | 986 | 1013 | 1030 | 269 |
| 25° | 737 | 739 | 777 | 811 | 846 | 339 |
| 35° | 521 | 523 | 558 | 596 | 638 | 324 |
| 45° | 312 | 318 | 339 | 365 | 398 | 243 |
| 55° | 180 | 187 | 198 | 205 | 222 | 163 |
| 65° | 90 | 97 | 106 | 93 | 84 | 94 |
| 75° | 45 | 45 | 41 | 28 | 19 | 48 |
| 85° | 13 | 13 | 12 | 8 | 5 | 14 |
| 90° | 2 | 6 | 13 | 14 | 13 | 5 |
| 95° | 67 | 236 | 722 | 374 | 222 | 71 |
| 105° | 218 | 337 | 1302 | 1921 | 1842 | 230 |
| 115° | 384 | 470 | 1080 | 2091 | 2360 | 379 |
| 125° | 526 | 603 | 974 | 1643 | 1930 | 469 |
| 135° | 631 | 705 | 947 | 1326 | 1502 | 487 |
| 145° | 733 | 788 | 934 | 1135 | 1222 | 459 |
| 155° | 828 | 860 | 926 | 1019 | 1052 | 382 |
| 165° | 901 | 910 | 930 | 967 | 972 | 254 |
| 175° | 935 | 934 | 931 | 943 | 941 | 89 |
| 180° | 934 | 934 | 934 | 934 | 934 | |



TEST NUMBER: P519552

CATALOG NUMBER: SQ4-WB-150U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1158.6 | 1158.6 | 1158.6 | 1158.6 | 1158.6 |
| 2.5° | 1161.5 | 1151.1 | 1153.7 | 1153.7 | 1150.5 |
| 5° | 1139.8 | 1128.4 | 1135.7 | 1138.4 | 1142.3 |
| 7.5° | 1097.5 | 1088.8 | 1102.3 | 1112.2 | 1120.3 |
| 10° | 1064.6 | 1057.1 | 1074.2 | 1088.7 | 1099.1 |
| 12.5° | 1026.3 | 1020.1 | 1041.3 | 1060.7 | 1074.3 |
| 15° | 963.9 | 960.4 | 986.3 | 1013.1 | 1030.5 |
| 17.5° | 897.1 | 895.4 | 925.1 | 956.4 | 978.6 |
| 20° | 851.5 | 851.0 | 883.6 | 916.2 | 942.0 |
| 22.5° | 805.6 | 806.7 | 840.9 | 874.8 | 904.2 |
| 25° | 736.6 | 738.6 | 776.8 | 810.7 | 846.5 |
| 27.5° | 672.9 | 673.8 | 713.3 | 749.0 | 787.2 |
| 30° | 629.4 | 631.9 | 670.6 | 707.6 | 747.3 |
| 32.5° | 585.9 | 588.7 | 626.6 | 664.9 | 705.4 |
| 35° | 520.6 | 523.1 | 558.2 | 595.8 | 638.0 |
| 37.5° | 453.3 | 456.7 | 487.8 | 523.4 | 564.9 |
| 40° | 409.8 | 414.7 | 442.3 | 475.8 | 516.5 |
| 42.5° | 367.9 | 374.0 | 399.6 | 431.3 | 468.1 |
| 45° | 312.1 | 318.1 | 339.1 | 364.8 | 398.1 |
| 47.5° | 264.2 | 271.0 | 287.1 | 309.2 | 337.7 |
| 50° | 236.9 | 243.4 | 258.3 | 274.6 | 301.5 |
| 52.5° | 212.9 | 219.4 | 232.6 | 245.3 | 268.1 |
| 55° | 179.5 | 186.9 | 197.8 | 205.3 | 222.2 |
| 57.5° | 152.0 | 159.2 | 167.8 | 171.2 | 181.4 |
| 60° | 133.7 | 141.7 | 149.5 | 149.1 | 154.5 |
| 62.5° | 117.0 | 123.8 | 131.6 | 126.2 | 126.5 |
| 65° | 90.0 | 97.4 | 106.3 | 92.8 | 84.4 |
| 67.5° | 72.7 | 74.3 | 83.4 | 64.7 | 54.7 |
| 70° | 64.6 | 64.6 | 67.1 | 50.1 | 41.7 |
| 72.5° | 56.8 | 56.8 | 54.5 | 40.8 | 31.9 |
| 75° | 45.2 | 45.2 | 41.2 | 28.3 | 19.3 |
| 77.5° | 34.9 | 34.5 | 31.5 | 21.1 | 14.0 |
| 80° | 28.0 | 28.0 | 25.4 | 16.7 | 11.2 |
| 82.5° | 21.9 | 21.9 | 19.7 | 13.0 | 8.3 |
| 85° | 12.7 | 12.7 | 11.7 | 7.6 | 4.6 |
| 87.5° | 4.9 | 5.7 | 6.7 | 5.2 | 4.6 |
| 90° | 2.0 | 5.9 | 13.1 | 14.1 | 13.1 |
| 92.5° | 28.6 | 104.1 | 205.4 | 89.2 | 64.6 |
| 95° | 67.4 | 236.5 | 722.1 | 373.7 | 222.3 |
| 97.5° | 108.2 | 271.3 | 1125.6 | 931.5 | 684.1 |
| 100° | 138.8 | 285.3 | 1251.1 | 1304.8 | 1055.0 |
| 102.5° | 167.0 | 304.8 | 1295.4 | 1587.8 | 1401.0 |
| 105° | 218.2 | 337.2 | 1302.4 | 1921.2 | 1842.5 |
| 107.5° | 265.7 | 374.3 | 1245.5 | 2129.1 | 2155.3 |
| 110° | 302.7 | 401.1 | 1194.8 | 2185.0 | 2296.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 335.7 | 427.8 | 1148.1 | 2173.8 | 2360.5 |
| 115° | 384.2 | 469.7 | 1080.2 | 2091.0 | 2360.5 |
| 117.5° | 431.7 | 511.9 | 1035.3 | 1964.5 | 2269.9 |
| 120° | 460.6 | 539.3 | 1008.8 | 1873.7 | 2185.5 |
| 122.5° | 488.0 | 565.1 | 992.7 | 1776.4 | 2090.5 |
| 125° | 526.0 | 602.7 | 973.6 | 1642.9 | 1930.0 |
| 127.5° | 561.0 | 636.3 | 962.3 | 1533.9 | 1786.4 |
| 130° | 580.3 | 658.0 | 957.5 | 1466.5 | 1694.7 |
| 132.5° | 600.4 | 677.3 | 952.6 | 1405.8 | 1615.8 |
| 135° | 630.6 | 705.3 | 947.4 | 1326.5 | 1501.6 |
| 137.5° | 661.0 | 731.6 | 943.0 | 1262.2 | 1404.8 |
| 140° | 681.9 | 747.8 | 941.4 | 1220.8 | 1347.7 |
| 142.5° | 702.0 | 764.0 | 938.1 | 1183.5 | 1294.6 |
| 145° | 733.2 | 788.2 | 934.3 | 1135.4 | 1222.0 |
| 147.5° | 761.5 | 810.3 | 929.9 | 1091.9 | 1158.4 |
| 150° | 782.5 | 825.7 | 928.3 | 1068.3 | 1121.4 |
| 152.5° | 801.8 | 839.5 | 927.5 | 1046.4 | 1090.0 |
| 155° | 827.7 | 860.2 | 926.3 | 1018.6 | 1052.0 |
| 157.5° | 854.7 | 877.3 | 926.5 | 999.2 | 1021.2 |
| 160° | 870.0 | 888.6 | 927.3 | 987.0 | 1002.7 |
| 162.5° | 882.0 | 897.6 | 928.1 | 977.2 | 989.0 |
| 165° | 901.1 | 910.0 | 930.3 | 966.6 | 971.5 |
| 167.5° | 914.2 | 920.3 | 930.5 | 957.5 | 959.9 |
| 170° | 922.3 | 925.2 | 931.3 | 953.4 | 953.4 |
| 172.5° | 928.7 | 929.3 | 931.3 | 948.6 | 947.8 |
| 175° | 935.3 | 934.3 | 931.3 | 943.3 | 941.4 |
| 177.5° | 937.5 | 935.2 | 931.1 | 939.1 | 936.7 |
| 180° | 934.3 | 934.3 | 934.3 | 934.3 | 934.3 |

(END OF REPORT)