

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: P519579

Luminaire Tested: **SQ4-WB-150U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519579
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-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

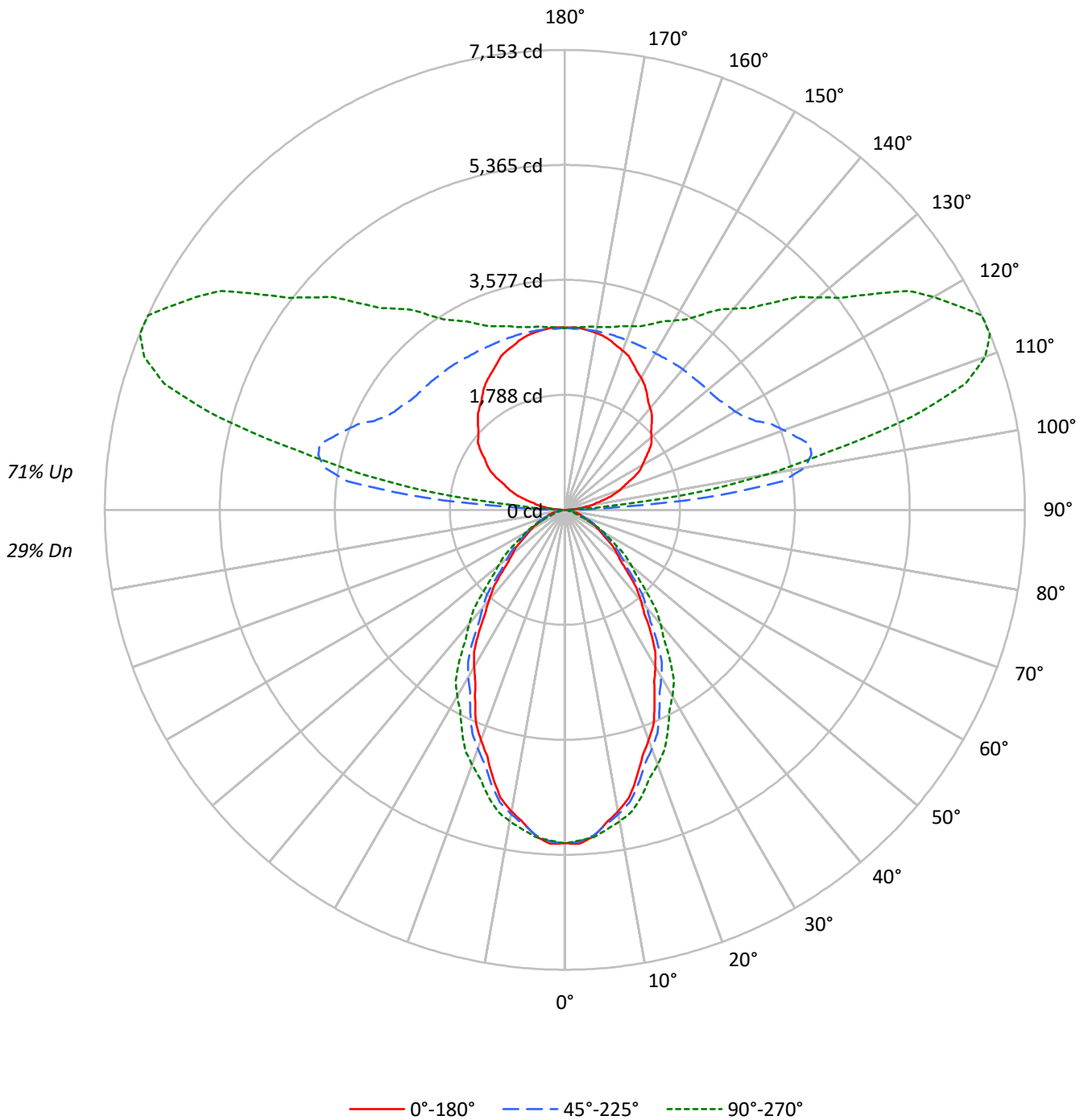
Lumens per Lamp: N/A
Luminaire Lumens: 25815.1 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 194.9
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: P519579

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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 | 102 | 102 | 102 | 102 | 92 | 92 | 92 | 92 | 72 | 72 | 72 | 54 | 54 | 54 | 37 | 37 | 37 | 29 | | | | |
| 1 | 94 | 90 | 86 | 83 | 84 | 81 | 78 | 75 | 64 | 62 | 60 | 48 | 47 | 46 | 34 | 33 | 33 | 26 | | | | |
| 2 | 86 | 79 | 74 | 69 | 77 | 71 | 67 | 63 | 57 | 54 | 51 | 43 | 41 | 39 | 31 | 29 | 28 | 23 | | | | |
| 3 | 79 | 70 | 64 | 58 | 71 | 63 | 58 | 53 | 51 | 47 | 44 | 39 | 36 | 34 | 28 | 26 | 25 | 20 | | | | |
| 4 | 72 | 63 | 55 | 50 | 65 | 57 | 50 | 46 | 45 | 41 | 38 | 35 | 32 | 30 | 25 | 24 | 22 | 18 | | | | |
| 5 | 67 | 56 | 49 | 43 | 60 | 51 | 44 | 40 | 41 | 36 | 33 | 32 | 29 | 26 | 23 | 21 | 20 | 16 | | | | |
| 6 | 62 | 50 | 43 | 38 | 55 | 46 | 39 | 35 | 37 | 32 | 29 | 29 | 26 | 23 | 21 | 19 | 18 | 15 | | | | |
| 7 | 57 | 46 | 38 | 33 | 51 | 42 | 35 | 31 | 34 | 29 | 26 | 26 | 23 | 21 | 20 | 18 | 16 | 13 | | | | |
| 8 | 53 | 41 | 34 | 29 | 48 | 38 | 32 | 27 | 31 | 26 | 23 | 24 | 21 | 19 | 18 | 16 | 15 | 12 | | | | |
| 9 | 49 | 38 | 31 | 26 | 44 | 35 | 29 | 24 | 28 | 24 | 21 | 22 | 19 | 17 | 17 | 15 | 13 | 11 | | | | |
| 10 | 46 | 35 | 28 | 24 | 42 | 32 | 26 | 22 | 26 | 22 | 19 | 21 | 18 | 15 | 16 | 14 | 12 | 10 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15946 | 15946 | 15946 |
| 5° | 15747 | 15691 | 15782 |
| 10° | 14878 | 15012 | 15361 |
| 15° | 13734 | 14053 | 14683 |
| 20° | 12472 | 12941 | 13797 |
| 25° | 11187 | 11797 | 12854 |
| 30° | 10002 | 10657 | 11877 |
| 35° | 8747 | 9379 | 10720 |
| 40° | 7362 | 7947 | 9280 |
| 45° | 6076 | 6600 | 7748 |
| 50° | 5072 | 5530 | 6455 |
| 55° | 4306 | 4745 | 5331 |
| 60° | 3681 | 4114 | 4254 |
| 65° | 2930 | 3460 | 2749 |
| 70° | 2598 | 2700 | 1678 |
| 75° | 2406 | 2190 | 1028 |
| 80° | 2216 | 2015 | 887 |
| 85° | 2008 | 1845 | 723 |



TEST NUMBER: P519579

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 475.6 | 1.8 |
| 10°-20° | 1237.0 | 4.8 |
| 20°-30° | 1602.3 | 6.2 |
| 30°-40° | 1569.0 | 6.1 |
| 40°-50° | 1201.0 | 4.7 |
| 50°-60° | 800.3 | 3.1 |
| 60°-70° | 436.7 | 1.7 |
| 70°-80° | 182.0 | 0.7 |
| 80°-90° | 57.4 | 0.2 |
| 90°-100° | 1315.8 | 5.1 |
| 100°-110° | 3557.5 | 13.8 |
| 110°-120° | 3740.2 | 14.5 |
| 120°-130° | 3038.1 | 11.8 |
| 130°-140° | 2383.1 | 9.2 |
| 140°-150° | 1829.1 | 7.1 |
| 150°-160° | 1315.4 | 5.1 |
| 160°-170° | 803.6 | 3.1 |
| 170°-180° | 270.9 | 1.0 |
| 0°-30° | 3314.9 | 12.8 |
| 0°-40° | 4884.0 | 18.9 |
| 0°-60° | 6885.3 | 26.7 |
| 0°-90° | 7561.4 | 29.3 |
| 90°-120° | 8613.5 | 33.4 |
| 90°-150° | 15863.8 | 61.5 |
| 90°-180° | 18254.0 | 70.7 |
| 0°-180° | 25815.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 5185 | 5185 | 5185 | 5185 | 5185 | |
| 5° | 5101 | 5050 | 5083 | 5094 | 5112 | 475 |
| 15° | 4314 | 4298 | 4414 | 4534 | 4612 | 1205 |
| 25° | 3297 | 3306 | 3476 | 3628 | 3788 | 1516 |
| 35° | 2330 | 2341 | 2498 | 2666 | 2855 | 1448 |
| 45° | 1397 | 1424 | 1518 | 1632 | 1781 | 1089 |
| 55° | 803 | 836 | 885 | 919 | 994 | 728 |
| 65° | 403 | 436 | 476 | 416 | 378 | 419 |
| 75° | 202 | 202 | 184 | 126 | 86 | 216 |
| 85° | 57 | 57 | 52 | 34 | 20 | 62 |
| 90° | 6 | 18 | 40 | 43 | 40 | 16 |
| 95° | 204 | 717 | 2188 | 1132 | 674 | 214 |
| 105° | 661 | 1022 | 3947 | 5822 | 5583 | 696 |
| 115° | 1164 | 1423 | 3273 | 6336 | 7153 | 1150 |
| 125° | 1594 | 1826 | 2950 | 4978 | 5848 | 1421 |
| 135° | 1911 | 2137 | 2871 | 4020 | 4550 | 1477 |
| 145° | 2222 | 2388 | 2831 | 3441 | 3703 | 1390 |
| 155° | 2508 | 2606 | 2807 | 3086 | 3188 | 1157 |
| 165° | 2731 | 2757 | 2819 | 2929 | 2944 | 769 |
| 175° | 2834 | 2831 | 2822 | 2858 | 2852 | 269 |
| 180° | 2831 | 2831 | 2831 | 2831 | 2831 | |

TEST NUMBER: P519579

CATALOG NUMBER: SQ4-WB-150U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 5185.0 | 5185.0 | 5185.0 | 5185.0 | 5185.0 |
| 2.5° | 5197.7 | 5151.5 | 5163.2 | 5162.8 | 5148.6 |
| 5° | 5100.8 | 5049.7 | 5082.6 | 5094.4 | 5112.2 |
| 7.5° | 4911.5 | 4872.8 | 4932.9 | 4977.4 | 5013.5 |
| 10° | 4764.1 | 4730.7 | 4807.3 | 4872.1 | 4918.8 |
| 12.5° | 4593.0 | 4565.0 | 4659.9 | 4746.8 | 4807.8 |
| 15° | 4313.6 | 4298.1 | 4413.7 | 4533.8 | 4611.7 |
| 17.5° | 4014.7 | 4007.1 | 4139.8 | 4279.9 | 4379.6 |
| 20° | 3810.8 | 3808.6 | 3954.2 | 4100.1 | 4215.8 |
| 22.5° | 3605.2 | 3610.1 | 3763.0 | 3914.8 | 4046.5 |
| 25° | 3296.7 | 3305.5 | 3476.4 | 3627.9 | 3788.1 |
| 27.5° | 3011.3 | 3015.4 | 3192.0 | 3352.0 | 3522.8 |
| 30° | 2816.6 | 2827.7 | 3000.9 | 3166.5 | 3344.4 |
| 32.5° | 2621.8 | 2634.8 | 2804.3 | 2975.4 | 3157.0 |
| 35° | 2329.7 | 2340.8 | 2498.1 | 2666.2 | 2855.3 |
| 37.5° | 2028.5 | 2043.6 | 2183.2 | 2342.1 | 2528.1 |
| 40° | 1833.7 | 1856.0 | 1979.4 | 2129.1 | 2311.5 |
| 42.5° | 1646.3 | 1673.9 | 1788.2 | 1930.3 | 2094.9 |
| 45° | 1396.9 | 1423.6 | 1517.5 | 1632.4 | 1781.4 |
| 47.5° | 1182.2 | 1212.9 | 1285.0 | 1383.9 | 1511.1 |
| 50° | 1060.2 | 1089.1 | 1155.8 | 1229.0 | 1349.1 |
| 52.5° | 952.8 | 981.7 | 1041.1 | 1097.6 | 1199.9 |
| 55° | 803.1 | 836.5 | 885.0 | 918.6 | 994.2 |
| 57.5° | 680.3 | 712.3 | 750.8 | 765.9 | 811.8 |
| 60° | 598.4 | 633.9 | 668.9 | 667.2 | 691.6 |
| 62.5° | 523.7 | 554.0 | 588.8 | 564.7 | 566.1 |
| 65° | 402.7 | 436.1 | 475.5 | 415.5 | 377.7 |
| 67.5° | 325.3 | 332.5 | 373.1 | 289.7 | 244.8 |
| 70° | 288.9 | 288.9 | 300.3 | 224.4 | 186.6 |
| 72.5° | 254.4 | 254.4 | 243.9 | 182.5 | 142.9 |
| 75° | 202.5 | 202.5 | 184.3 | 126.5 | 86.5 |
| 77.5° | 156.1 | 154.3 | 141.1 | 94.4 | 62.8 |
| 80° | 125.1 | 125.1 | 113.8 | 74.5 | 50.1 |
| 82.5° | 97.8 | 97.8 | 88.3 | 58.2 | 37.3 |
| 85° | 56.9 | 56.9 | 52.3 | 33.8 | 20.5 |
| 87.5° | 21.2 | 23.6 | 26.1 | 19.4 | 17.0 |
| 90° | 6.1 | 18.0 | 39.6 | 42.6 | 39.6 |
| 92.5° | 86.6 | 315.4 | 622.3 | 270.1 | 195.7 |
| 95° | 204.2 | 716.7 | 2188.2 | 1132.4 | 673.5 |
| 97.5° | 327.9 | 822.0 | 3410.8 | 2822.7 | 2073.0 |
| 100° | 420.6 | 864.6 | 3791.2 | 3953.8 | 3196.9 |
| 102.5° | 505.9 | 923.7 | 3925.3 | 4811.4 | 4245.3 |
| 105° | 661.3 | 1021.9 | 3946.6 | 5821.5 | 5583.1 |
| 107.5° | 805.2 | 1134.1 | 3774.1 | 6451.7 | 6530.9 |
| 110° | 917.3 | 1215.3 | 3620.5 | 6620.9 | 6957.6 |



TEST NUMBER: P519579

CATALOG NUMBER: SQ4-WB-150U-075D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 1017.3 | 1296.2 | 3479.1 | 6587.1 | 7152.6 |
| 115° | 1164.2 | 1423.4 | 3273.1 | 6336.2 | 7152.6 |
| 117.5° | 1308.0 | 1551.2 | 3137.2 | 5952.8 | 6878.3 |
| 120° | 1395.8 | 1634.2 | 3056.7 | 5677.7 | 6622.4 |
| 122.5° | 1478.7 | 1712.3 | 3007.9 | 5382.9 | 6334.7 |
| 125° | 1593.9 | 1826.3 | 2950.0 | 4978.2 | 5848.3 |
| 127.5° | 1699.9 | 1928.2 | 2915.9 | 4647.9 | 5413.1 |
| 130° | 1758.4 | 1993.9 | 2901.3 | 4443.8 | 5135.1 |
| 132.5° | 1819.4 | 2052.4 | 2886.7 | 4259.7 | 4896.2 |
| 135° | 1910.8 | 2137.3 | 2870.8 | 4019.6 | 4550.0 |
| 137.5° | 2002.9 | 2216.8 | 2857.4 | 3824.8 | 4256.8 |
| 140° | 2066.2 | 2265.9 | 2852.5 | 3699.3 | 4083.7 |
| 142.5° | 2127.2 | 2314.9 | 2842.8 | 3586.1 | 3922.8 |
| 145° | 2221.7 | 2388.5 | 2831.2 | 3440.6 | 3702.8 |
| 147.5° | 2307.6 | 2455.4 | 2817.8 | 3308.7 | 3510.2 |
| 150° | 2371.0 | 2502.1 | 2812.9 | 3237.1 | 3398.0 |
| 152.5° | 2429.5 | 2543.9 | 2810.5 | 3170.6 | 3302.9 |
| 155° | 2508.1 | 2606.5 | 2806.8 | 3086.4 | 3187.8 |
| 157.5° | 2589.8 | 2658.4 | 2807.4 | 3027.7 | 3094.5 |
| 160° | 2636.1 | 2692.8 | 2809.9 | 2990.7 | 3038.4 |
| 162.5° | 2672.7 | 2719.8 | 2812.3 | 2961.2 | 2997.0 |
| 165° | 2730.6 | 2757.4 | 2819.0 | 2929.0 | 2943.9 |
| 167.5° | 2770.2 | 2788.7 | 2819.6 | 2901.4 | 2908.6 |
| 170° | 2794.6 | 2803.6 | 2822.0 | 2889.1 | 2889.1 |
| 172.5° | 2814.1 | 2815.9 | 2822.0 | 2874.4 | 2872.0 |
| 175° | 2834.2 | 2831.3 | 2822.0 | 2858.5 | 2852.5 |
| 177.5° | 2840.9 | 2833.8 | 2821.4 | 2845.7 | 2838.5 |
| 180° | 2831.2 | 2831.2 | 2831.2 | 2831.2 | 2831.2 |

(END OF REPORT)