

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: P519575

Luminaire Tested: **SQ4-WB-150U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519575
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

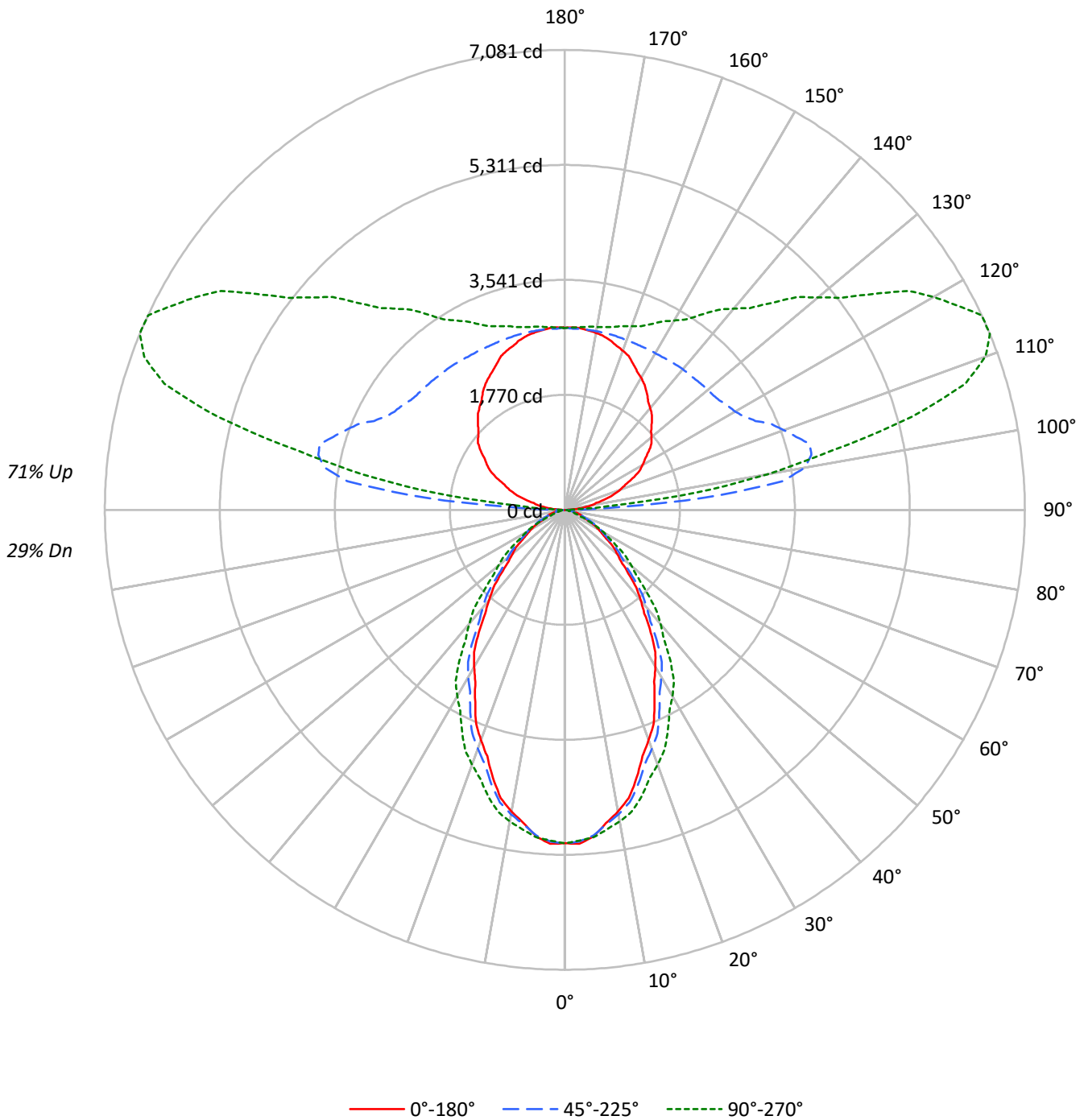
Lumens per Lamp: N/A
Luminaire Lumens: 25558.0 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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



TEST NUMBER: P519575
CATALOG NUMBER: SQ4-WB-150U-075D-835-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P519575

CATALOG NUMBER: SQ4-WB-150U-075D-835-1D-UNV-STD-W-12

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 | 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° | 15787 | 15787 | 15787 |
| 5° | 15590 | 15535 | 15625 |
| 10° | 14729 | 14863 | 15208 |
| 15° | 13597 | 13913 | 14537 |
| 20° | 12348 | 12812 | 13660 |
| 25° | 11075 | 11679 | 12726 |
| 30° | 9902 | 10551 | 11758 |
| 35° | 8659 | 9285 | 10613 |
| 40° | 7289 | 7867 | 9188 |
| 45° | 6015 | 6534 | 7671 |
| 50° | 5022 | 5474 | 6391 |
| 55° | 4263 | 4698 | 5278 |
| 60° | 3644 | 4073 | 4211 |
| 65° | 2901 | 3426 | 2721 |
| 70° | 2573 | 2673 | 1661 |
| 75° | 2382 | 2167 | 1017 |
| 80° | 2194 | 1994 | 878 |
| 85° | 1987 | 1828 | 716 |



TEST NUMBER: P519575

CATALOG NUMBER: SQ4-WB-150U-075D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 470.9 | 1.8 |
| 10°-20° | 1224.7 | 4.8 |
| 20°-30° | 1586.3 | 6.2 |
| 30°-40° | 1553.4 | 6.1 |
| 40°-50° | 1189.1 | 4.7 |
| 50°-60° | 792.3 | 3.1 |
| 60°-70° | 432.4 | 1.7 |
| 70°-80° | 180.2 | 0.7 |
| 80°-90° | 56.9 | 0.2 |
| 90°-100° | 1302.7 | 5.1 |
| 100°-110° | 3522.1 | 13.8 |
| 110°-120° | 3703.0 | 14.5 |
| 120°-130° | 3007.8 | 11.8 |
| 130°-140° | 2359.4 | 9.2 |
| 140°-150° | 1810.8 | 7.1 |
| 150°-160° | 1302.3 | 5.1 |
| 160°-170° | 795.6 | 3.1 |
| 170°-180° | 268.2 | 1.0 |
| 0°-30° | 3281.9 | 12.8 |
| 0°-40° | 4835.3 | 18.9 |
| 0°-60° | 6816.7 | 26.7 |
| 0°-90° | 7486.1 | 29.3 |
| 90°-120° | 8527.7 | 33.4 |
| 90°-150° | 15705.8 | 61.5 |
| 90°-180° | 18072.0 | 70.7 |
| 0°-180° | 25558.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 5133 | 5133 | 5133 | 5133 | 5133 | |
| 5° | 5050 | 4999 | 5032 | 5044 | 5061 | 470 |
| 15° | 4271 | 4255 | 4370 | 4489 | 4566 | 1193 |
| 25° | 3264 | 3273 | 3442 | 3592 | 3750 | 1501 |
| 35° | 2306 | 2318 | 2473 | 2640 | 2827 | 1434 |
| 45° | 1383 | 1409 | 1502 | 1616 | 1764 | 1079 |
| 55° | 795 | 828 | 876 | 909 | 984 | 721 |
| 65° | 399 | 432 | 471 | 411 | 374 | 414 |
| 75° | 200 | 200 | 182 | 125 | 86 | 214 |
| 85° | 56 | 56 | 52 | 34 | 20 | 61 |
| 90° | 6 | 18 | 39 | 42 | 39 | 16 |
| 95° | 202 | 710 | 2166 | 1121 | 667 | 212 |
| 105° | 655 | 1012 | 3907 | 5764 | 5528 | 690 |
| 115° | 1153 | 1409 | 3240 | 6273 | 7081 | 1138 |
| 125° | 1578 | 1808 | 2921 | 4929 | 5790 | 1407 |
| 135° | 1892 | 2116 | 2842 | 3980 | 4505 | 1462 |
| 145° | 2200 | 2365 | 2803 | 3406 | 3666 | 1376 |
| 155° | 2483 | 2580 | 2779 | 3056 | 3156 | 1145 |
| 165° | 2703 | 2730 | 2791 | 2900 | 2915 | 762 |
| 175° | 2806 | 2803 | 2794 | 2830 | 2824 | 266 |
| 180° | 2803 | 2803 | 2803 | 2803 | 2803 | |

TEST NUMBER: P519575

CATALOG NUMBER: SQ4-WB-150U-075D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 5133.3 | 5133.3 | 5133.3 | 5133.3 | 5133.3 |
| 2.5° | 5146.0 | 5100.1 | 5111.7 | 5111.4 | 5097.3 |
| 5° | 5050.0 | 4999.3 | 5032.0 | 5043.6 | 5061.3 |
| 7.5° | 4862.6 | 4824.3 | 4883.8 | 4927.8 | 4963.5 |
| 10° | 4716.6 | 4683.6 | 4759.4 | 4823.6 | 4869.8 |
| 12.5° | 4547.3 | 4519.5 | 4613.5 | 4699.5 | 4759.9 |
| 15° | 4270.7 | 4255.2 | 4369.8 | 4488.6 | 4565.7 |
| 17.5° | 3974.7 | 3967.2 | 4098.6 | 4237.3 | 4336.0 |
| 20° | 3772.9 | 3770.7 | 3914.8 | 4059.3 | 4173.8 |
| 22.5° | 3569.2 | 3574.1 | 3725.6 | 3875.8 | 4006.2 |
| 25° | 3263.8 | 3272.6 | 3441.8 | 3591.8 | 3750.3 |
| 27.5° | 2981.3 | 2985.3 | 3160.2 | 3318.6 | 3487.7 |
| 30° | 2788.5 | 2799.6 | 2971.0 | 3134.9 | 3311.1 |
| 32.5° | 2595.7 | 2608.5 | 2776.4 | 2945.8 | 3125.5 |
| 35° | 2306.5 | 2317.5 | 2473.2 | 2639.6 | 2826.8 |
| 37.5° | 2008.3 | 2023.3 | 2161.5 | 2318.8 | 2502.9 |
| 40° | 1815.5 | 1837.5 | 1959.6 | 2107.9 | 2288.5 |
| 42.5° | 1629.9 | 1657.2 | 1770.4 | 1911.1 | 2074.1 |
| 45° | 1383.0 | 1409.4 | 1502.4 | 1616.1 | 1763.7 |
| 47.5° | 1170.4 | 1200.8 | 1272.2 | 1370.1 | 1496.1 |
| 50° | 1049.6 | 1078.3 | 1144.2 | 1216.8 | 1335.7 |
| 52.5° | 943.3 | 972.0 | 1030.7 | 1086.6 | 1187.9 |
| 55° | 795.1 | 828.2 | 876.2 | 909.4 | 984.3 |
| 57.5° | 673.5 | 705.2 | 743.3 | 758.3 | 803.7 |
| 60° | 592.4 | 627.6 | 662.2 | 660.5 | 684.7 |
| 62.5° | 518.5 | 548.5 | 582.9 | 559.1 | 560.4 |
| 65° | 398.7 | 431.7 | 470.8 | 411.3 | 373.9 |
| 67.5° | 322.1 | 329.1 | 369.4 | 286.9 | 242.4 |
| 70° | 286.1 | 286.1 | 297.3 | 222.1 | 184.7 |
| 72.5° | 251.8 | 251.8 | 241.5 | 180.7 | 141.5 |
| 75° | 200.5 | 200.5 | 182.4 | 125.2 | 85.6 |
| 77.5° | 154.5 | 152.8 | 139.7 | 93.4 | 62.2 |
| 80° | 123.9 | 123.9 | 112.6 | 73.8 | 49.6 |
| 82.5° | 96.9 | 96.9 | 87.4 | 57.6 | 36.9 |
| 85° | 56.3 | 56.3 | 51.8 | 33.5 | 20.3 |
| 87.5° | 21.0 | 23.4 | 25.9 | 19.2 | 16.9 |
| 90° | 6.0 | 17.8 | 39.2 | 42.2 | 39.2 |
| 92.5° | 85.7 | 312.3 | 616.1 | 267.5 | 193.7 |
| 95° | 202.2 | 709.6 | 2166.4 | 1121.1 | 666.8 |
| 97.5° | 324.7 | 813.8 | 3376.9 | 2794.6 | 2052.3 |
| 100° | 416.4 | 855.9 | 3753.4 | 3914.4 | 3165.0 |
| 102.5° | 500.9 | 914.5 | 3886.2 | 4763.5 | 4203.0 |
| 105° | 654.7 | 1011.7 | 3907.3 | 5763.5 | 5527.5 |
| 107.5° | 797.1 | 1122.8 | 3736.5 | 6387.4 | 6465.9 |
| 110° | 908.2 | 1203.2 | 3584.4 | 6554.9 | 6888.3 |



TEST NUMBER: P519575

CATALOG NUMBER: SQ4-WB-150U-075D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 1007.1 | 1283.3 | 3444.4 | 6521.4 | 7081.4 |
| 115° | 1152.6 | 1409.2 | 3240.5 | 6273.0 | 7081.4 |
| 117.5° | 1295.0 | 1535.7 | 3105.9 | 5893.5 | 6809.8 |
| 120° | 1381.9 | 1617.9 | 3026.3 | 5621.2 | 6556.4 |
| 122.5° | 1463.9 | 1695.2 | 2978.0 | 5329.3 | 6271.6 |
| 125° | 1578.0 | 1808.1 | 2920.7 | 4928.6 | 5790.0 |
| 127.5° | 1683.0 | 1909.0 | 2886.9 | 4601.6 | 5359.2 |
| 130° | 1740.9 | 1974.0 | 2872.4 | 4399.5 | 5084.0 |
| 132.5° | 1801.3 | 2032.0 | 2857.9 | 4217.3 | 4847.4 |
| 135° | 1891.8 | 2116.0 | 2842.2 | 3979.6 | 4504.7 |
| 137.5° | 1982.9 | 2194.7 | 2828.9 | 3786.7 | 4214.4 |
| 140° | 2045.7 | 2243.3 | 2824.1 | 3662.5 | 4043.1 |
| 142.5° | 2106.0 | 2291.9 | 2814.4 | 3550.4 | 3883.7 |
| 145° | 2199.5 | 2364.7 | 2803.0 | 3406.3 | 3665.9 |
| 147.5° | 2284.6 | 2431.0 | 2789.7 | 3275.8 | 3475.2 |
| 150° | 2347.4 | 2477.2 | 2784.9 | 3204.9 | 3364.2 |
| 152.5° | 2405.3 | 2518.6 | 2782.5 | 3139.1 | 3270.0 |
| 155° | 2483.2 | 2580.5 | 2778.8 | 3055.7 | 3156.0 |
| 157.5° | 2564.0 | 2631.9 | 2779.4 | 2997.6 | 3063.7 |
| 160° | 2609.9 | 2665.9 | 2781.9 | 2960.9 | 3008.2 |
| 162.5° | 2646.1 | 2692.7 | 2784.3 | 2931.7 | 2967.1 |
| 165° | 2703.4 | 2730.0 | 2790.9 | 2899.9 | 2914.6 |
| 167.5° | 2742.6 | 2760.9 | 2791.5 | 2872.5 | 2879.6 |
| 170° | 2766.8 | 2775.6 | 2793.9 | 2860.3 | 2860.3 |
| 172.5° | 2786.1 | 2787.9 | 2793.9 | 2845.8 | 2843.4 |
| 175° | 2806.0 | 2803.0 | 2793.9 | 2830.0 | 2824.1 |
| 177.5° | 2812.6 | 2805.6 | 2793.3 | 2817.3 | 2810.2 |
| 180° | 2803.0 | 2803.0 | 2803.0 | 2803.0 | 2803.0 |

(END OF REPORT)