

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: P565101

Luminaire Tested: **SQ4-PW1-150U-050D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565101
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
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: 23861.9 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

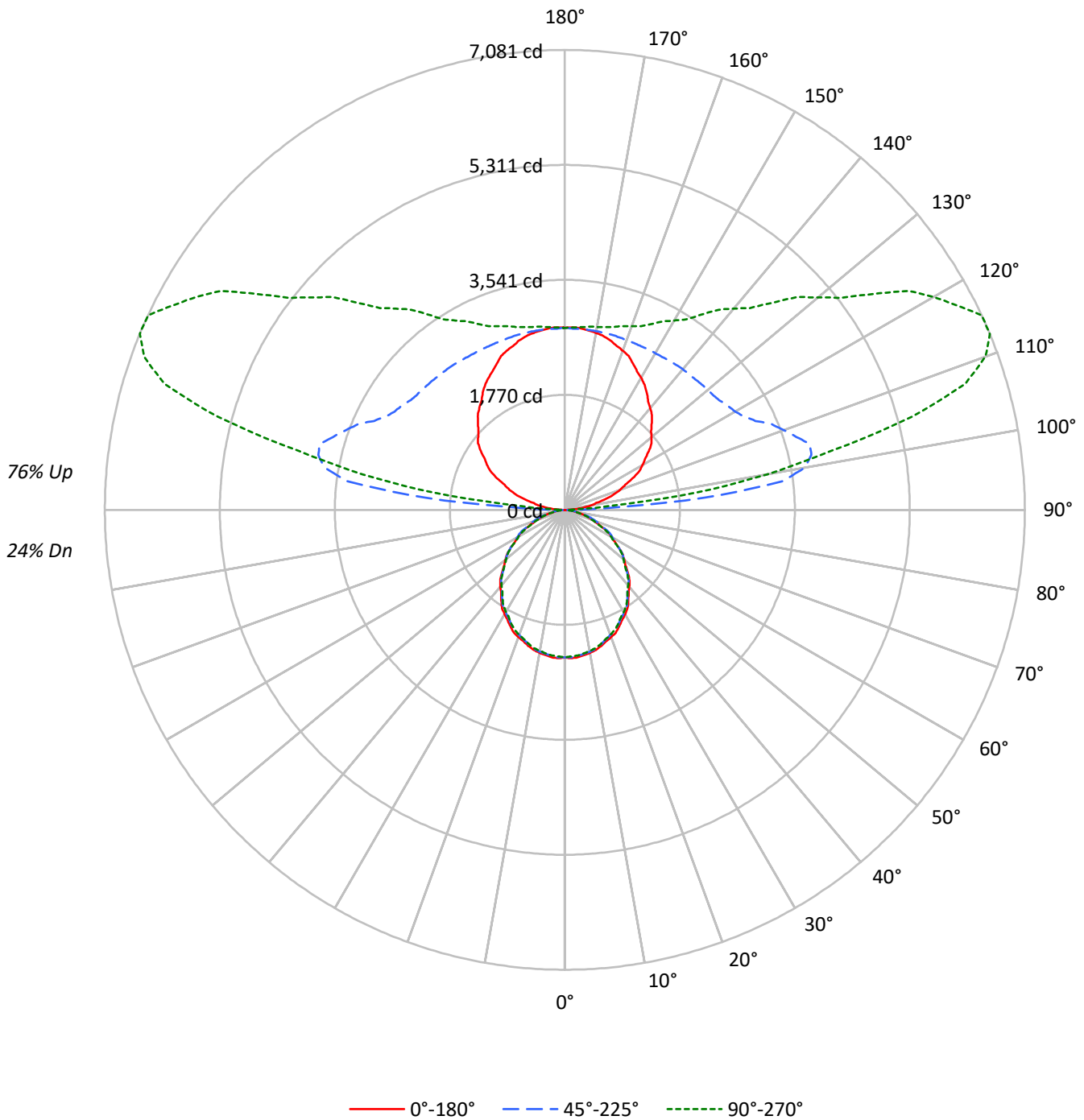
Input Watts (W): 168.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 69 | 69 | 69 | 50 | 50 | 50 | 32 | 32 | 32 | 24 |
| 1 | 92 | 88 | 84 | 81 | 82 | 78 | 75 | 72 | 60 | 58 | 57 | 44 | 43 | 42 | 29 | 28 | 27 | 21 |
| 2 | 84 | 77 | 71 | 66 | 74 | 68 | 64 | 59 | 53 | 50 | 47 | 39 | 37 | 35 | 25 | 24 | 23 | 17 |
| 3 | 76 | 67 | 60 | 55 | 68 | 60 | 54 | 50 | 47 | 43 | 39 | 34 | 32 | 29 | 22 | 21 | 20 | 15 |
| 4 | 70 | 60 | 52 | 46 | 62 | 53 | 47 | 42 | 41 | 37 | 33 | 30 | 27 | 25 | 20 | 18 | 17 | 13 |
| 5 | 64 | 53 | 45 | 39 | 57 | 47 | 41 | 36 | 37 | 32 | 29 | 27 | 24 | 22 | 18 | 16 | 15 | 11 |
| 6 | 59 | 47 | 40 | 34 | 52 | 42 | 36 | 31 | 33 | 28 | 25 | 24 | 21 | 19 | 16 | 14 | 13 | 10 |
| 7 | 54 | 43 | 35 | 30 | 48 | 38 | 32 | 27 | 30 | 25 | 22 | 22 | 19 | 17 | 15 | 13 | 11 | 9 |
| 8 | 50 | 38 | 31 | 26 | 45 | 35 | 28 | 24 | 27 | 22 | 19 | 20 | 17 | 15 | 14 | 12 | 10 | 8 |
| 9 | 47 | 35 | 28 | 23 | 41 | 31 | 25 | 21 | 25 | 20 | 17 | 18 | 15 | 13 | 13 | 11 | 9 | 7 |
| 10 | 43 | 32 | 25 | 20 | 39 | 29 | 23 | 19 | 23 | 18 | 15 | 17 | 14 | 12 | 12 | 10 | 8 | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6992 | 6992 | 6992 |
| 5° | 7037 | 6981 | 6950 |
| 10° | 6980 | 6924 | 6887 |
| 15° | 6906 | 6830 | 6805 |
| 20° | 6824 | 6719 | 6706 |
| 25° | 6729 | 6606 | 6586 |
| 30° | 6587 | 6487 | 6444 |
| 35° | 6400 | 6309 | 6272 |
| 40° | 6200 | 6103 | 6079 |
| 45° | 5959 | 5880 | 5854 |
| 50° | 5712 | 5664 | 5626 |
| 55° | 5445 | 5445 | 5359 |
| 60° | 5113 | 5212 | 5026 |
| 65° | 4679 | 4912 | 4562 |
| 70° | 4125 | 4521 | 4017 |
| 75° | 3522 | 4046 | 3427 |
| 80° | 2731 | 3406 | 2766 |
| 85° | 1768 | 2615 | 2332 |



TEST NUMBER: P565101

CATALOG NUMBER: SQ4-PW1-150U-050D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 214.1 | 0.9 |
| 10°-20° | 604.4 | 2.5 |
| 20°-30° | 896.5 | 3.8 |
| 30°-40° | 1049.0 | 4.4 |
| 40°-50° | 1044.3 | 4.4 |
| 50°-60° | 901.8 | 3.8 |
| 60°-70° | 649.2 | 2.7 |
| 70°-80° | 340.4 | 1.4 |
| 80°-90° | 90.2 | 0.4 |
| 90°-100° | 1302.7 | 5.5 |
| 100°-110° | 3522.1 | 14.8 |
| 110°-120° | 3703.0 | 15.5 |
| 120°-130° | 3007.8 | 12.6 |
| 130°-140° | 2359.4 | 9.9 |
| 140°-150° | 1810.8 | 7.6 |
| 150°-160° | 1302.3 | 5.5 |
| 160°-170° | 795.6 | 3.3 |
| 170°-180° | 268.2 | 1.1 |
| 0°-30° | 1715.0 | 7.2 |
| 0°-40° | 2764.0 | 11.6 |
| 0°-60° | 4710.2 | 19.7 |
| 0°-90° | 5790.0 | 24.3 |
| 90°-120° | 8527.7 | 35.7 |
| 90°-150° | 15705.8 | 65.8 |
| 90°-180° | 18072.0 | 75.7 |
| 0°-180° | 23861.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2273 | 2273 | 2273 | 2273 | 2273 | |
| 5° | 2279 | 2254 | 2261 | 2255 | 2251 | 216 |
| 15° | 2169 | 2142 | 2145 | 2141 | 2137 | 611 |
| 25° | 1983 | 1950 | 1947 | 1935 | 1941 | 912 |
| 35° | 1705 | 1681 | 1680 | 1665 | 1670 | 1066 |
| 45° | 1370 | 1358 | 1352 | 1348 | 1346 | 1057 |
| 55° | 1016 | 1014 | 1016 | 1002 | 1000 | 906 |
| 65° | 643 | 662 | 675 | 648 | 627 | 637 |
| 75° | 296 | 324 | 340 | 318 | 288 | 318 |
| 85° | 50 | 66 | 74 | 70 | 66 | 66 |
| 90° | 6 | 18 | 39 | 42 | 39 | 15 |
| 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: P565101

CATALOG NUMBER: SQ4-PW1-150U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2273.4 | 2273.4 | 2273.4 | 2273.4 | 2273.4 |
| 2.5° | 2286.2 | 2267.4 | 2273.4 | 2268.3 | 2257.4 |
| 5° | 2279.4 | 2254.0 | 2261.4 | 2255.3 | 2251.4 |
| 7.5° | 2256.2 | 2232.7 | 2238.2 | 2231.7 | 2229.3 |
| 10° | 2235.3 | 2211.8 | 2217.3 | 2209.2 | 2205.3 |
| 12.5° | 2211.3 | 2186.2 | 2191.7 | 2183.6 | 2181.3 |
| 15° | 2169.2 | 2141.8 | 2145.2 | 2141.1 | 2137.2 |
| 17.5° | 2120.4 | 2092.6 | 2093.1 | 2086.7 | 2085.9 |
| 20° | 2085.1 | 2055.7 | 2053.1 | 2045.2 | 2049.1 |
| 22.5° | 2046.7 | 2015.7 | 2013.0 | 2001.9 | 2007.4 |
| 25° | 1983.0 | 1949.7 | 1946.9 | 1935.0 | 1940.9 |
| 27.5° | 1909.3 | 1876.4 | 1876.4 | 1859.7 | 1866.0 |
| 30° | 1854.8 | 1823.4 | 1826.7 | 1806.9 | 1814.7 |
| 32.5° | 1797.1 | 1768.9 | 1770.7 | 1750.8 | 1758.6 |
| 35° | 1704.6 | 1681.1 | 1680.5 | 1664.6 | 1670.5 |
| 37.5° | 1610.0 | 1589.3 | 1586.0 | 1576.8 | 1578.4 |
| 40° | 1544.3 | 1526.7 | 1520.3 | 1514.3 | 1514.3 |
| 42.5° | 1475.4 | 1459.3 | 1453.0 | 1448.5 | 1447.0 |
| 45° | 1370.1 | 1358.3 | 1352.0 | 1348.0 | 1346.0 |
| 47.5° | 1265.9 | 1254.9 | 1249.5 | 1246.6 | 1244.7 |
| 50° | 1193.8 | 1186.0 | 1183.8 | 1177.7 | 1175.8 |
| 52.5° | 1121.7 | 1117.0 | 1114.9 | 1107.2 | 1105.3 |
| 55° | 1015.5 | 1013.6 | 1015.5 | 1001.5 | 999.5 |
| 57.5° | 905.0 | 908.1 | 914.6 | 895.6 | 890.9 |
| 60° | 831.2 | 839.1 | 847.3 | 825.1 | 817.2 |
| 62.5° | 755.9 | 768.5 | 780.0 | 754.5 | 743.5 |
| 65° | 643.0 | 662.5 | 675.0 | 648.5 | 626.9 |
| 67.5° | 534.0 | 558.3 | 573.3 | 544.7 | 520.4 |
| 70° | 458.7 | 486.1 | 502.8 | 474.1 | 446.7 |
| 72.5° | 393.0 | 423.5 | 437.1 | 410.0 | 382.6 |
| 75° | 296.4 | 323.9 | 340.5 | 317.8 | 288.4 |
| 77.5° | 210.3 | 236.2 | 250.0 | 230.2 | 205.9 |
| 80° | 154.2 | 181.6 | 192.3 | 175.8 | 156.2 |
| 82.5° | 109.4 | 132.1 | 139.4 | 129.5 | 116.2 |
| 85° | 50.1 | 65.7 | 74.1 | 70.0 | 66.1 |
| 87.5° | 14.0 | 27.4 | 38.3 | 38.9 | 39.9 |
| 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 |

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CATALOG NUMBER: SQ4-PW1-150U-050D-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)