

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: P565009

Luminaire Tested: **SQ4-PW1-125U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565009
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-PW1-125U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20996.7 lumens
Efficiency: N/A
Efficacy: 143.4 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

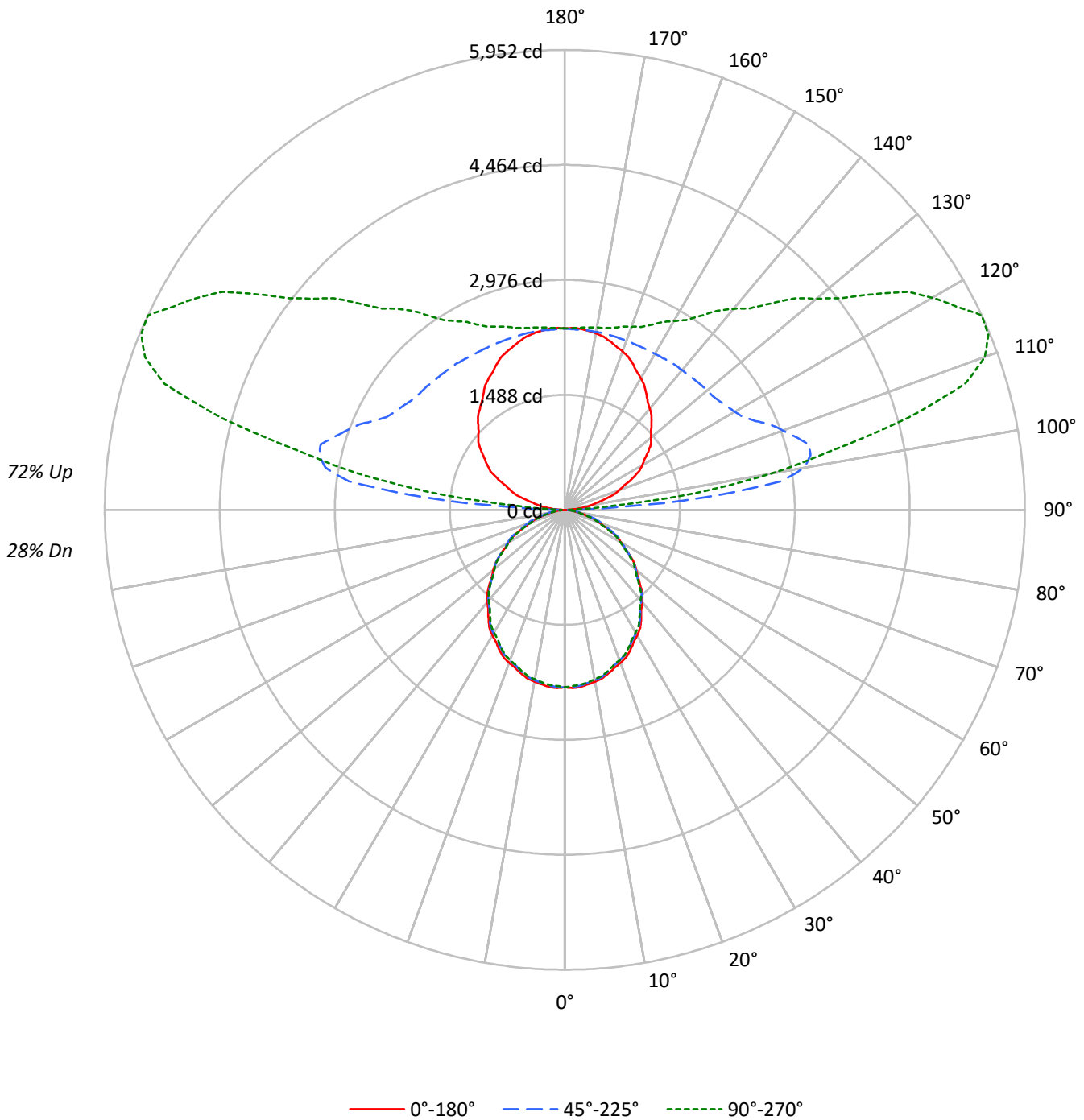
Input Watts (W): 146.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P565009

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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 | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 | 53 | 53 | 53 | 36 | 36 | 36 | 28 |
| 1 | 93 | 89 | 85 | 82 | 83 | 79 | 76 | 74 | 62 | 60 | 58 | 46 | 45 | 44 | 32 | 31 | 30 | 24 |
| 2 | 85 | 77 | 72 | 67 | 75 | 69 | 65 | 60 | 55 | 51 | 48 | 41 | 39 | 37 | 28 | 27 | 26 | 20 |
| 3 | 77 | 68 | 61 | 55 | 69 | 61 | 55 | 50 | 48 | 44 | 41 | 36 | 33 | 31 | 25 | 23 | 22 | 17 |
| 4 | 70 | 60 | 53 | 47 | 63 | 54 | 48 | 43 | 43 | 38 | 34 | 32 | 29 | 26 | 22 | 20 | 19 | 14 |
| 5 | 65 | 53 | 46 | 40 | 58 | 48 | 41 | 36 | 38 | 33 | 30 | 29 | 25 | 23 | 20 | 18 | 16 | 13 |
| 6 | 59 | 48 | 40 | 34 | 53 | 43 | 36 | 31 | 34 | 29 | 26 | 26 | 22 | 20 | 18 | 16 | 14 | 11 |
| 7 | 55 | 43 | 35 | 30 | 49 | 39 | 32 | 27 | 31 | 26 | 22 | 23 | 20 | 18 | 16 | 14 | 13 | 10 |
| 8 | 51 | 39 | 31 | 26 | 45 | 35 | 29 | 24 | 28 | 23 | 20 | 21 | 18 | 16 | 15 | 13 | 11 | 9 |
| 9 | 47 | 35 | 28 | 23 | 42 | 32 | 26 | 21 | 26 | 21 | 18 | 20 | 16 | 14 | 14 | 12 | 10 | 8 |
| 10 | 44 | 32 | 25 | 21 | 39 | 29 | 23 | 19 | 23 | 19 | 16 | 18 | 15 | 12 | 13 | 11 | 9 | 7 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7062 | 7062 | 7062 |
| 5° | 7108 | 7051 | 7020 |
| 10° | 7051 | 6994 | 6956 |
| 15° | 6976 | 6899 | 6873 |
| 20° | 6893 | 6787 | 6774 |
| 25° | 6796 | 6673 | 6652 |
| 30° | 6653 | 6552 | 6509 |
| 35° | 6464 | 6373 | 6335 |
| 40° | 6262 | 6165 | 6140 |
| 45° | 6019 | 5939 | 5913 |
| 50° | 5769 | 5721 | 5682 |
| 55° | 5500 | 5500 | 5413 |
| 60° | 5164 | 5264 | 5077 |
| 65° | 4726 | 4961 | 4608 |
| 70° | 4166 | 4566 | 4057 |
| 75° | 3558 | 4086 | 3461 |
| 80° | 2759 | 3439 | 2795 |
| 85° | 1785 | 2643 | 2357 |



TEST NUMBER: P565009

CATALOG NUMBER: SQ4-PW1-125U-050D-840-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 216.2 | 1.0 |
| 10°-20° | 610.5 | 2.9 |
| 20°-30° | 905.5 | 4.3 |
| 30°-40° | 1059.6 | 5.0 |
| 40°-50° | 1054.8 | 5.0 |
| 50°-60° | 910.9 | 4.3 |
| 60°-70° | 655.7 | 3.1 |
| 70°-80° | 343.8 | 1.6 |
| 80°-90° | 90.8 | 0.4 |
| 90°-100° | 1097.8 | 5.2 |
| 100°-110° | 2957.1 | 14.1 |
| 110°-120° | 3103.4 | 14.8 |
| 120°-130° | 2518.3 | 12.0 |
| 130°-140° | 1975.0 | 9.4 |
| 140°-150° | 1516.3 | 7.2 |
| 150°-160° | 1090.2 | 5.2 |
| 160°-170° | 666.1 | 3.2 |
| 170°-180° | 224.6 | 1.1 |
| 0°-30° | 1732.2 | 8.3 |
| 0°-40° | 2791.8 | 13.3 |
| 0°-60° | 4757.6 | 22.7 |
| 0°-90° | 5847.8 | 27.9 |
| 90°-120° | 7158.3 | 34.1 |
| 90°-150° | 13168.0 | 62.7 |
| 90°-180° | 15149.0 | 72.1 |
| 0°-180° | 20996.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2296 | 2296 | 2296 | 2296 | 2296 | |
| 5° | 2302 | 2277 | 2284 | 2278 | 2274 | 218 |
| 15° | 2191 | 2163 | 2167 | 2163 | 2159 | 618 |
| 25° | 2003 | 1969 | 1966 | 1954 | 1960 | 921 |
| 35° | 1722 | 1698 | 1697 | 1681 | 1687 | 1076 |
| 45° | 1384 | 1372 | 1366 | 1362 | 1360 | 1068 |
| 55° | 1026 | 1024 | 1026 | 1012 | 1010 | 915 |
| 65° | 649 | 669 | 682 | 655 | 633 | 644 |
| 75° | 299 | 327 | 344 | 321 | 291 | 321 |
| 85° | 51 | 66 | 75 | 71 | 67 | 67 |
| 90° | 6 | 18 | 36 | 39 | 39 | 14 |
| 95° | 167 | 597 | 1800 | 920 | 637 | 175 |
| 105° | 547 | 851 | 3270 | 4893 | 4592 | 575 |
| 115° | 966 | 1182 | 2723 | 5262 | 5952 | 950 |
| 125° | 1318 | 1514 | 2445 | 4133 | 4864 | 1177 |
| 135° | 1587 | 1772 | 2376 | 3334 | 3776 | 1225 |
| 145° | 1836 | 1979 | 2347 | 2851 | 3061 | 1151 |
| 155° | 2084 | 2160 | 2326 | 2558 | 2640 | 959 |
| 165° | 2260 | 2286 | 2335 | 2428 | 2439 | 637 |
| 175° | 2350 | 2347 | 2338 | 2370 | 2365 | 223 |
| 180° | 2347 | 2347 | 2347 | 2347 | 2347 | |

TEST NUMBER: P565009

CATALOG NUMBER: SQ4-PW1-125U-050D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2296.3 | 2296.3 | 2296.3 | 2296.3 | 2296.3 |
| 2.5° | 2309.2 | 2290.2 | 2296.3 | 2291.2 | 2280.1 |
| 5° | 2302.4 | 2276.6 | 2284.1 | 2278.0 | 2274.0 |
| 7.5° | 2278.9 | 2255.1 | 2260.7 | 2254.1 | 2251.8 |
| 10° | 2257.8 | 2234.1 | 2239.6 | 2231.4 | 2227.5 |
| 12.5° | 2233.6 | 2208.2 | 2213.7 | 2205.6 | 2203.2 |
| 15° | 2191.1 | 2163.4 | 2166.8 | 2162.7 | 2158.7 |
| 17.5° | 2141.7 | 2113.6 | 2114.2 | 2107.7 | 2106.9 |
| 20° | 2106.1 | 2076.4 | 2073.7 | 2065.7 | 2069.7 |
| 22.5° | 2067.3 | 2036.0 | 2033.3 | 2022.1 | 2027.6 |
| 25° | 2002.9 | 1969.3 | 1966.5 | 1954.5 | 1960.4 |
| 27.5° | 1928.5 | 1895.2 | 1895.3 | 1878.4 | 1884.8 |
| 30° | 1873.4 | 1841.8 | 1845.1 | 1825.1 | 1833.0 |
| 32.5° | 1815.2 | 1786.7 | 1788.5 | 1768.4 | 1776.3 |
| 35° | 1721.7 | 1698.0 | 1697.4 | 1681.4 | 1687.3 |
| 37.5° | 1626.2 | 1605.2 | 1601.9 | 1592.7 | 1594.2 |
| 40° | 1559.9 | 1542.0 | 1535.6 | 1529.5 | 1529.5 |
| 42.5° | 1490.3 | 1474.0 | 1467.6 | 1463.1 | 1461.5 |
| 45° | 1383.8 | 1372.0 | 1365.6 | 1361.5 | 1359.6 |
| 47.5° | 1278.6 | 1267.6 | 1262.0 | 1259.2 | 1257.2 |
| 50° | 1205.8 | 1197.9 | 1195.7 | 1189.6 | 1187.6 |
| 52.5° | 1133.0 | 1128.2 | 1126.1 | 1118.4 | 1116.4 |
| 55° | 1025.7 | 1023.8 | 1025.7 | 1011.5 | 1009.6 |
| 57.5° | 914.1 | 917.2 | 923.8 | 904.6 | 899.9 |
| 60° | 839.6 | 847.5 | 855.8 | 833.4 | 825.4 |
| 62.5° | 763.5 | 776.2 | 787.8 | 762.1 | 751.0 |
| 65° | 649.4 | 669.2 | 681.8 | 655.0 | 633.2 |
| 67.5° | 539.4 | 563.9 | 579.0 | 550.1 | 525.6 |
| 70° | 463.3 | 491.0 | 507.8 | 478.9 | 451.2 |
| 72.5° | 396.9 | 427.8 | 441.5 | 414.1 | 386.4 |
| 75° | 299.4 | 327.1 | 343.9 | 321.0 | 291.3 |
| 77.5° | 212.4 | 238.5 | 252.5 | 232.5 | 208.0 |
| 80° | 155.8 | 183.5 | 194.2 | 177.6 | 157.8 |
| 82.5° | 110.5 | 133.4 | 140.8 | 130.8 | 117.3 |
| 85° | 50.6 | 66.4 | 74.9 | 70.7 | 66.8 |
| 87.5° | 14.1 | 27.6 | 37.9 | 38.6 | 40.1 |
| 90° | 6.0 | 17.7 | 35.9 | 38.9 | 38.9 |
| 92.5° | 72.9 | 257.7 | 509.4 | 245.2 | 170.4 |
| 95° | 167.4 | 597.1 | 1799.6 | 920.3 | 636.7 |
| 97.5° | 267.2 | 683.5 | 2822.5 | 2358.0 | 1778.1 |
| 100° | 343.8 | 717.9 | 3147.8 | 3293.5 | 2732.3 |
| 102.5° | 417.9 | 766.3 | 3255.4 | 3994.1 | 3533.4 |
| 105° | 547.0 | 851.0 | 3270.3 | 4892.7 | 4591.6 |
| 107.5° | 669.0 | 940.3 | 3131.0 | 5354.5 | 5432.2 |
| 110° | 750.3 | 1007.5 | 3004.3 | 5497.9 | 5781.4 |

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CATALOG NUMBER: SQ4-PW1-125U-050D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 836.4 | 1074.9 | 2882.3 | 5466.1 | 5932.0 |
| 115° | 965.6 | 1181.9 | 2723.3 | 5262.0 | 5951.8 |
| 117.5° | 1083.3 | 1286.2 | 2600.1 | 4936.1 | 5704.3 |
| 120° | 1159.9 | 1355.7 | 2538.0 | 4702.2 | 5491.4 |
| 122.5° | 1226.8 | 1420.3 | 2492.5 | 4463.0 | 5249.9 |
| 125° | 1318.3 | 1514.1 | 2445.3 | 4132.9 | 4863.7 |
| 127.5° | 1406.2 | 1599.1 | 2415.4 | 3841.8 | 4494.2 |
| 130° | 1458.8 | 1651.7 | 2403.4 | 3675.0 | 4247.9 |
| 132.5° | 1511.4 | 1702.0 | 2391.5 | 3528.0 | 4054.1 |
| 135° | 1587.3 | 1771.5 | 2376.5 | 3334.2 | 3775.5 |
| 137.5° | 1659.7 | 1836.2 | 2368.8 | 3169.8 | 3532.2 |
| 140° | 1709.9 | 1879.4 | 2361.6 | 3068.5 | 3395.9 |
| 142.5° | 1762.5 | 1920.4 | 2356.8 | 2974.1 | 3250.0 |
| 145° | 1835.5 | 1978.7 | 2346.6 | 2850.6 | 3061.1 |
| 147.5° | 1914.4 | 2038.9 | 2336.5 | 2746.8 | 2912.2 |
| 150° | 1967.0 | 2075.1 | 2331.7 | 2681.6 | 2818.9 |
| 152.5° | 2014.8 | 2108.9 | 2329.3 | 2628.4 | 2740.0 |
| 155° | 2083.6 | 2159.6 | 2325.7 | 2557.7 | 2639.6 |
| 157.5° | 2144.0 | 2203.0 | 2326.3 | 2508.1 | 2563.1 |
| 160° | 2182.2 | 2231.9 | 2328.7 | 2479.1 | 2520.0 |
| 162.5° | 2215.7 | 2256.0 | 2331.1 | 2454.9 | 2484.1 |
| 165° | 2259.9 | 2286.2 | 2334.7 | 2427.6 | 2439.3 |
| 167.5° | 2295.8 | 2311.0 | 2337.7 | 2406.5 | 2411.2 |
| 170° | 2319.7 | 2325.6 | 2337.7 | 2394.5 | 2394.5 |
| 172.5° | 2334.1 | 2335.2 | 2340.1 | 2382.5 | 2382.5 |
| 175° | 2349.6 | 2346.7 | 2337.7 | 2370.4 | 2364.6 |
| 177.5° | 2356.2 | 2351.5 | 2339.5 | 2358.5 | 2353.8 |
| 180° | 2346.6 | 2346.6 | 2346.6 | 2346.6 | 2346.6 |

(END OF REPORT)