

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: P565049

Luminaire Tested: **SQ4-PW1-125U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565049
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-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24853.5 lumens
Efficiency: N/A
Efficacy: 123.5 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: General Diffuse

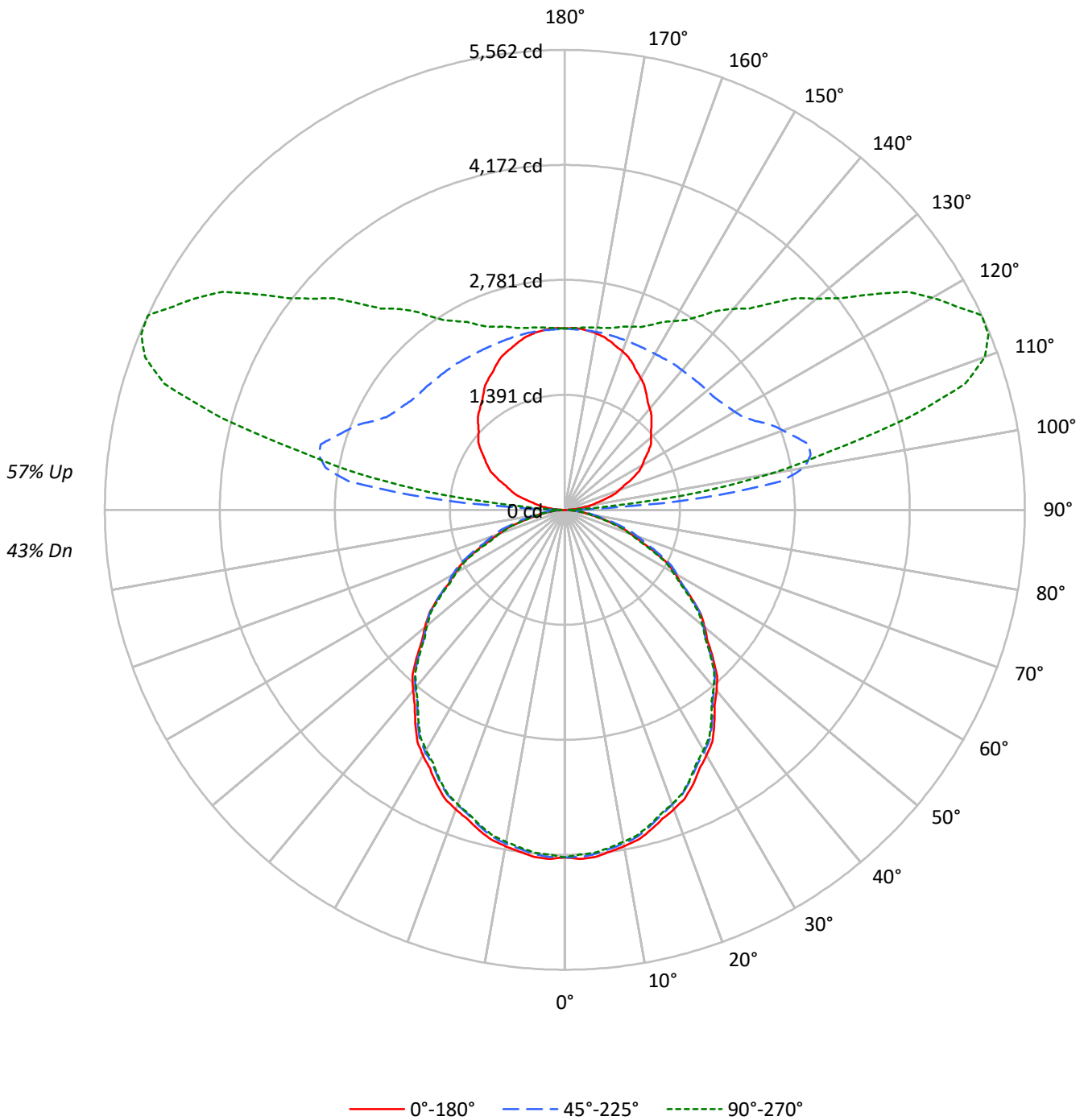
Input Watts (W): 201.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P565049

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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 | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 | 43 |
| 1 | 96 | 92 | 88 | 85 | 88 | 84 | 81 | 78 | 70 | 67 | 65 | 56 | 55 | 53 | 44 | 43 | 42 | 36 |
| 2 | 88 | 80 | 74 | 69 | 80 | 74 | 69 | 64 | 61 | 57 | 54 | 50 | 47 | 45 | 39 | 37 | 36 | 31 |
| 3 | 80 | 71 | 64 | 58 | 73 | 65 | 59 | 54 | 54 | 49 | 46 | 44 | 41 | 38 | 34 | 32 | 30 | 26 |
| 4 | 73 | 63 | 55 | 49 | 67 | 58 | 51 | 45 | 48 | 43 | 39 | 39 | 35 | 32 | 31 | 28 | 26 | 22 |
| 5 | 67 | 56 | 48 | 42 | 61 | 51 | 44 | 39 | 43 | 38 | 33 | 35 | 31 | 28 | 28 | 25 | 23 | 19 |
| 6 | 62 | 50 | 42 | 36 | 56 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 25 | 25 | 22 | 20 | 17 |
| 7 | 57 | 45 | 37 | 32 | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 20 | 18 | 15 |
| 8 | 53 | 41 | 33 | 28 | 48 | 38 | 31 | 26 | 32 | 27 | 23 | 26 | 22 | 19 | 21 | 18 | 16 | 14 |
| 9 | 49 | 37 | 30 | 25 | 45 | 34 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 17 | 14 | 12 |
| 10 | 46 | 34 | 27 | 22 | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 16 | 18 | 15 | 13 | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12924 | 12924 | 12924 |
| 5° | 13007 | 12905 | 12847 |
| 10° | 12904 | 12800 | 12730 |
| 15° | 12767 | 12625 | 12578 |
| 20° | 12614 | 12421 | 12396 |
| 25° | 12438 | 12212 | 12174 |
| 30° | 12175 | 11991 | 11912 |
| 35° | 11829 | 11663 | 11593 |
| 40° | 11460 | 11282 | 11237 |
| 45° | 11015 | 10870 | 10821 |
| 50° | 10558 | 10469 | 10399 |
| 55° | 10065 | 10065 | 9906 |
| 60° | 9451 | 9633 | 9291 |
| 65° | 8649 | 9080 | 8433 |
| 70° | 7624 | 8356 | 7425 |
| 75° | 6512 | 7479 | 6336 |
| 80° | 5049 | 6294 | 5115 |
| 85° | 3268 | 4834 | 4312 |



TEST NUMBER: P565049

CATALOG NUMBER: SQ4-PW1-125U-100D-830-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 395.7 | 1.6 |
| 10°-20° | 1117.2 | 4.5 |
| 20°-30° | 1657.2 | 6.7 |
| 30°-40° | 1939.1 | 7.8 |
| 40°-50° | 1930.4 | 7.8 |
| 50°-60° | 1667.0 | 6.7 |
| 60°-70° | 1199.9 | 4.8 |
| 70°-80° | 629.3 | 2.5 |
| 80°-90° | 161.2 | 0.6 |
| 90°-100° | 1025.9 | 4.1 |
| 100°-110° | 2763.4 | 11.1 |
| 110°-120° | 2900.1 | 11.7 |
| 120°-130° | 2353.3 | 9.5 |
| 130°-140° | 1845.6 | 7.4 |
| 140°-150° | 1417.0 | 5.7 |
| 150°-160° | 1018.8 | 4.1 |
| 160°-170° | 622.4 | 2.5 |
| 170°-180° | 209.9 | 0.8 |
| 0°-30° | 3170.1 | 12.8 |
| 0°-40° | 5109.2 | 20.6 |
| 0°-60° | 8706.7 | 35.0 |
| 0°-90° | 10697.0 | 43.0 |
| 90°-120° | 6689.3 | 26.9 |
| 90°-150° | 12305.3 | 49.5 |
| 90°-180° | 14156.0 | 57.0 |
| 0°-180° | 24853.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4202 | 4202 | 4202 | 4202 | 4202 | |
| 5° | 4213 | 4166 | 4180 | 4169 | 4162 | 399 |
| 15° | 4010 | 3959 | 3965 | 3958 | 3951 | 1130 |
| 25° | 3666 | 3604 | 3599 | 3577 | 3588 | 1685 |
| 35° | 3151 | 3107 | 3106 | 3077 | 3088 | 1970 |
| 45° | 2532 | 2511 | 2499 | 2492 | 2488 | 1954 |
| 55° | 1877 | 1874 | 1877 | 1851 | 1848 | 1675 |
| 65° | 1188 | 1225 | 1248 | 1199 | 1159 | 1178 |
| 75° | 548 | 599 | 629 | 588 | 533 | 587 |
| 85° | 93 | 122 | 137 | 129 | 122 | 122 |
| 90° | 6 | 16 | 34 | 36 | 36 | 14 |
| 95° | 156 | 558 | 1682 | 860 | 595 | 163 |
| 105° | 511 | 795 | 3056 | 4572 | 4291 | 537 |
| 115° | 902 | 1104 | 2545 | 4917 | 5562 | 888 |
| 125° | 1232 | 1415 | 2285 | 3862 | 4545 | 1100 |
| 135° | 1483 | 1655 | 2221 | 3116 | 3528 | 1145 |
| 145° | 1715 | 1849 | 2193 | 2664 | 2861 | 1076 |
| 155° | 1947 | 2018 | 2173 | 2390 | 2467 | 896 |
| 165° | 2112 | 2136 | 2182 | 2269 | 2280 | 596 |
| 175° | 2196 | 2193 | 2184 | 2215 | 2210 | 209 |
| 180° | 2193 | 2193 | 2193 | 2193 | 2193 | |

TEST NUMBER: P565049

CATALOG NUMBER: SQ4-PW1-125U-100D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4202.3 | 4202.3 | 4202.3 | 4202.3 | 4202.3 |
| 2.5° | 4226.0 | 4191.3 | 4202.3 | 4193.0 | 4172.7 |
| 5° | 4213.4 | 4166.4 | 4180.1 | 4168.8 | 4161.6 |
| 7.5° | 4170.5 | 4127.0 | 4137.2 | 4125.2 | 4120.9 |
| 10° | 4132.0 | 4088.5 | 4098.7 | 4083.7 | 4076.4 |
| 12.5° | 4087.6 | 4041.2 | 4051.3 | 4036.4 | 4032.0 |
| 15° | 4009.8 | 3959.1 | 3965.4 | 3957.8 | 3950.6 |
| 17.5° | 3919.5 | 3868.1 | 3869.1 | 3857.2 | 3855.8 |
| 20° | 3854.3 | 3800.0 | 3795.1 | 3780.4 | 3787.7 |
| 22.5° | 3783.2 | 3726.0 | 3721.0 | 3700.5 | 3710.6 |
| 25° | 3665.5 | 3603.9 | 3598.8 | 3576.9 | 3587.7 |
| 27.5° | 3529.2 | 3468.4 | 3468.5 | 3437.7 | 3449.2 |
| 30° | 3428.5 | 3370.6 | 3376.7 | 3340.0 | 3354.5 |
| 32.5° | 3321.9 | 3269.7 | 3273.0 | 3236.3 | 3250.8 |
| 35° | 3150.8 | 3107.4 | 3106.4 | 3077.0 | 3087.9 |
| 37.5° | 2976.1 | 2937.7 | 2931.6 | 2914.7 | 2917.6 |
| 40° | 2854.6 | 2822.0 | 2810.2 | 2799.1 | 2799.1 |
| 42.5° | 2727.3 | 2697.6 | 2685.8 | 2677.6 | 2674.7 |
| 45° | 2532.5 | 2510.8 | 2499.2 | 2491.7 | 2488.1 |
| 47.5° | 2340.0 | 2319.7 | 2309.6 | 2304.3 | 2300.7 |
| 50° | 2206.7 | 2192.2 | 2188.2 | 2177.0 | 2173.4 |
| 52.5° | 2073.4 | 2064.7 | 2060.8 | 2046.7 | 2043.0 |
| 55° | 1877.2 | 1873.5 | 1877.2 | 1851.2 | 1847.5 |
| 57.5° | 1672.8 | 1678.6 | 1690.6 | 1655.6 | 1646.9 |
| 60° | 1536.5 | 1551.0 | 1566.2 | 1525.1 | 1510.6 |
| 62.5° | 1397.3 | 1420.5 | 1441.8 | 1394.6 | 1374.4 |
| 65° | 1188.5 | 1224.7 | 1247.7 | 1198.7 | 1158.9 |
| 67.5° | 987.1 | 1032.0 | 1059.7 | 1006.8 | 961.9 |
| 70° | 847.9 | 898.6 | 929.3 | 876.3 | 825.7 |
| 72.5° | 726.4 | 782.9 | 807.9 | 757.9 | 707.2 |
| 75° | 548.0 | 598.7 | 629.4 | 587.5 | 533.2 |
| 77.5° | 388.8 | 436.5 | 462.1 | 425.5 | 380.6 |
| 80° | 285.1 | 335.8 | 355.4 | 325.0 | 288.8 |
| 82.5° | 202.2 | 244.2 | 257.7 | 239.4 | 214.7 |
| 85° | 92.6 | 121.5 | 137.0 | 129.4 | 122.2 |
| 87.5° | 24.8 | 47.3 | 63.0 | 63.6 | 66.5 |
| 90° | 5.6 | 16.5 | 33.5 | 36.3 | 36.3 |
| 92.5° | 68.2 | 240.8 | 476.0 | 229.2 | 159.2 |
| 95° | 156.4 | 558.0 | 1681.7 | 860.0 | 595.0 |
| 97.5° | 249.7 | 638.7 | 2637.6 | 2203.5 | 1661.6 |
| 100° | 321.3 | 670.9 | 2941.6 | 3077.7 | 2553.3 |
| 102.5° | 390.5 | 716.1 | 3042.1 | 3732.4 | 3301.9 |
| 105° | 511.2 | 795.3 | 3056.1 | 4572.2 | 4290.8 |
| 107.5° | 625.2 | 878.7 | 2925.9 | 5003.7 | 5076.4 |
| 110° | 701.2 | 941.5 | 2807.5 | 5137.7 | 5402.6 |

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CATALOG NUMBER: SQ4-PW1-125U-100D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 781.6 | 1004.5 | 2693.5 | 5108.0 | 5543.4 |
| 115° | 902.3 | 1104.4 | 2544.9 | 4917.3 | 5561.9 |
| 117.5° | 1012.4 | 1201.9 | 2429.8 | 4612.7 | 5330.6 |
| 120° | 1083.9 | 1266.9 | 2371.7 | 4394.2 | 5131.7 |
| 122.5° | 1146.5 | 1327.3 | 2329.2 | 4170.7 | 4906.0 |
| 125° | 1231.9 | 1414.9 | 2285.1 | 3862.2 | 4545.0 |
| 127.5° | 1314.1 | 1494.3 | 2257.2 | 3590.1 | 4199.8 |
| 130° | 1363.2 | 1543.5 | 2246.0 | 3434.2 | 3969.6 |
| 132.5° | 1412.4 | 1590.5 | 2234.8 | 3296.9 | 3788.6 |
| 135° | 1483.4 | 1655.4 | 2220.8 | 3115.8 | 3528.2 |
| 137.5° | 1551.0 | 1715.9 | 2213.6 | 2962.1 | 3300.8 |
| 140° | 1597.9 | 1756.3 | 2206.9 | 2867.5 | 3173.4 |
| 142.5° | 1647.1 | 1794.5 | 2202.4 | 2779.3 | 3037.1 |
| 145° | 1715.2 | 1849.1 | 2192.9 | 2663.9 | 2860.6 |
| 147.5° | 1789.0 | 1905.3 | 2183.4 | 2566.8 | 2721.4 |
| 150° | 1838.1 | 1939.2 | 2178.9 | 2505.9 | 2634.3 |
| 152.5° | 1882.8 | 1970.8 | 2176.7 | 2456.2 | 2560.5 |
| 155° | 1947.1 | 2018.1 | 2173.3 | 2390.2 | 2466.7 |
| 157.5° | 2003.5 | 2058.7 | 2173.9 | 2343.8 | 2395.2 |
| 160° | 2039.3 | 2085.7 | 2176.1 | 2316.7 | 2354.9 |
| 162.5° | 2070.5 | 2108.2 | 2178.4 | 2294.1 | 2321.4 |
| 165° | 2111.9 | 2136.5 | 2181.7 | 2268.6 | 2279.5 |
| 167.5° | 2145.4 | 2159.6 | 2184.5 | 2248.9 | 2253.2 |
| 170° | 2167.8 | 2173.2 | 2184.5 | 2237.6 | 2237.6 |
| 172.5° | 2181.2 | 2182.3 | 2186.8 | 2226.4 | 2226.4 |
| 175° | 2195.7 | 2193.0 | 2184.5 | 2215.1 | 2209.7 |
| 177.5° | 2201.8 | 2197.5 | 2186.2 | 2204.0 | 2199.6 |
| 180° | 2192.9 | 2192.9 | 2192.9 | 2192.9 | 2192.9 |

(END OF REPORT)