

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: P564329

Luminaire Tested: **SQ4-PR1-125U-050D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564329
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-125U-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

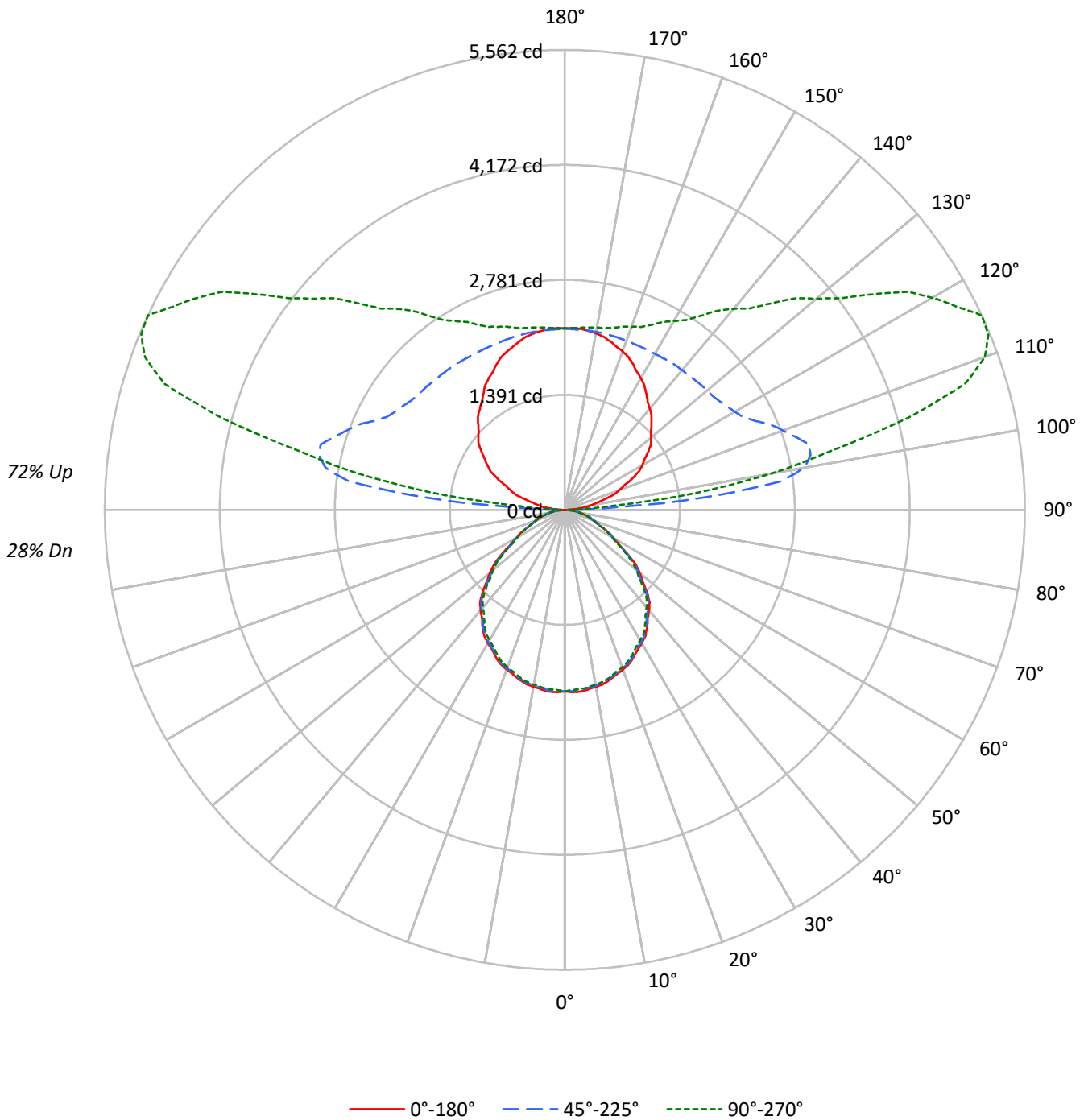
Lumens per Lamp: N/A
Luminaire Lumens: 19648.9 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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





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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 | 80 | 77 | 74 | 62 | 60 | 58 | 47 | 45 | 44 | 32 | 31 | 31 | 24 |
| 2 | 85 | 78 | 72 | 67 | 76 | 70 | 65 | 61 | 55 | 51 | 49 | 41 | 39 | 37 | 28 | 27 | 26 | 20 |
| 3 | 77 | 68 | 61 | 56 | 69 | 61 | 56 | 51 | 48 | 44 | 41 | 36 | 34 | 31 | 25 | 24 | 22 | 17 |
| 4 | 71 | 61 | 53 | 47 | 63 | 54 | 48 | 43 | 43 | 39 | 35 | 32 | 29 | 27 | 23 | 21 | 19 | 15 |
| 5 | 65 | 54 | 46 | 40 | 58 | 48 | 42 | 37 | 38 | 34 | 30 | 29 | 26 | 23 | 20 | 18 | 17 | 13 |
| 6 | 60 | 48 | 40 | 35 | 53 | 43 | 37 | 32 | 35 | 30 | 26 | 26 | 23 | 20 | 18 | 16 | 15 | 12 |
| 7 | 55 | 43 | 36 | 30 | 49 | 39 | 33 | 28 | 31 | 26 | 23 | 24 | 20 | 18 | 17 | 15 | 13 | 10 |
| 8 | 51 | 39 | 32 | 27 | 46 | 35 | 29 | 25 | 28 | 24 | 20 | 22 | 18 | 16 | 15 | 13 | 12 | 9 |
| 9 | 47 | 36 | 29 | 24 | 42 | 32 | 26 | 22 | 26 | 21 | 18 | 20 | 17 | 14 | 14 | 12 | 11 | 8 |
| 10 | 44 | 33 | 26 | 21 | 40 | 30 | 23 | 19 | 24 | 19 | 16 | 18 | 15 | 13 | 13 | 11 | 10 | 8 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6751 | 6751 | 6751 |
| 5° | 6811 | 6759 | 6724 |
| 10° | 6790 | 6743 | 6707 |
| 15° | 6760 | 6718 | 6682 |
| 20° | 6726 | 6683 | 6633 |
| 25° | 6678 | 6634 | 6557 |
| 30° | 6607 | 6559 | 6466 |
| 35° | 6509 | 6452 | 6360 |
| 40° | 6360 | 6292 | 6179 |
| 45° | 6101 | 5995 | 5871 |
| 50° | 5644 | 5509 | 5400 |
| 55° | 4926 | 4815 | 4714 |
| 60° | 4151 | 4117 | 4035 |
| 65° | 3590 | 3604 | 3577 |
| 70° | 3298 | 3315 | 3315 |
| 75° | 3168 | 3168 | 3190 |
| 80° | 2981 | 3014 | 2981 |
| 85° | 2403 | 2668 | 2668 |



TEST NUMBER: P564329

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 207.6 | 1.1 |
| 10°-20° | 593.9 | 3.0 |
| 20°-30° | 895.8 | 4.6 |
| 30°-40° | 1067.3 | 5.4 |
| 40°-50° | 1052.3 | 5.4 |
| 50°-60° | 804.2 | 4.1 |
| 60°-70° | 497.7 | 2.5 |
| 70°-80° | 282.7 | 1.4 |
| 80°-90° | 91.1 | 0.5 |
| 90°-100° | 1025.9 | 5.2 |
| 100°-110° | 2763.4 | 14.1 |
| 110°-120° | 2900.1 | 14.8 |
| 120°-130° | 2353.3 | 12.0 |
| 130°-140° | 1845.6 | 9.4 |
| 140°-150° | 1417.0 | 7.2 |
| 150°-160° | 1018.8 | 5.2 |
| 160°-170° | 622.4 | 3.2 |
| 170°-180° | 209.9 | 1.1 |
| 0°-30° | 1697.2 | 8.6 |
| 0°-40° | 2764.5 | 14.1 |
| 0°-60° | 4620.9 | 23.5 |
| 0°-90° | 5492.4 | 28.0 |
| 90°-120° | 6689.3 | 34.0 |
| 90°-150° | 12305.3 | 62.6 |
| 90°-180° | 14156.0 | 72.0 |
| 0°-180° | 19648.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2195 | 2195 | 2195 | 2195 | 2195 | |
| 5° | 2206 | 2182 | 2189 | 2182 | 2178 | 209 |
| 15° | 2123 | 2101 | 2110 | 2102 | 2099 | 599 |
| 25° | 1968 | 1944 | 1955 | 1934 | 1932 | 906 |
| 35° | 1734 | 1713 | 1719 | 1696 | 1694 | 1082 |
| 45° | 1403 | 1384 | 1378 | 1354 | 1350 | 1075 |
| 55° | 919 | 904 | 898 | 883 | 879 | 823 |
| 65° | 493 | 490 | 495 | 492 | 492 | 500 |
| 75° | 267 | 267 | 267 | 268 | 268 | 282 |
| 85° | 68 | 72 | 76 | 76 | 76 | 79 |
| 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: P564329

CATALOG NUMBER: SQ4-PR1-125U-050D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2195.0 | 2195.0 | 2195.0 | 2195.0 | 2195.0 |
| 2.5° | 2208.6 | 2189.4 | 2195.0 | 2190.2 | 2179.9 |
| 5° | 2206.3 | 2182.3 | 2189.3 | 2181.7 | 2178.0 |
| 7.5° | 2189.3 | 2165.7 | 2172.7 | 2165.1 | 2162.9 |
| 10° | 2174.2 | 2152.0 | 2159.1 | 2151.4 | 2147.7 |
| 12.5° | 2157.6 | 2133.9 | 2142.4 | 2133.3 | 2129.6 |
| 15° | 2123.2 | 2101.0 | 2109.9 | 2102.3 | 2098.6 |
| 17.5° | 2085.3 | 2061.7 | 2070.6 | 2061.8 | 2057.0 |
| 20° | 2055.1 | 2032.9 | 2041.9 | 2028.6 | 2026.7 |
| 22.5° | 2021.8 | 1999.6 | 2008.6 | 1990.8 | 1990.4 |
| 25° | 1968.1 | 1944.1 | 1954.9 | 1934.1 | 1932.2 |
| 27.5° | 1904.2 | 1882.0 | 1891.0 | 1869.8 | 1867.5 |
| 30° | 1860.4 | 1838.2 | 1847.1 | 1824.4 | 1820.7 |
| 32.5° | 1810.4 | 1789.7 | 1797.2 | 1774.5 | 1772.3 |
| 35° | 1733.7 | 1713.4 | 1718.6 | 1695.8 | 1694.0 |
| 37.5° | 1646.3 | 1627.9 | 1630.8 | 1605.8 | 1604.0 |
| 40° | 1584.3 | 1565.8 | 1567.3 | 1540.8 | 1539.0 |
| 42.5° | 1516.3 | 1497.8 | 1496.2 | 1469.7 | 1467.9 |
| 45° | 1402.8 | 1384.3 | 1378.3 | 1353.6 | 1349.9 |
| 47.5° | 1273.5 | 1255.0 | 1243.6 | 1223.5 | 1221.0 |
| 50° | 1179.7 | 1161.3 | 1151.4 | 1134.2 | 1128.7 |
| 52.5° | 1078.4 | 1059.9 | 1051.6 | 1035.9 | 1030.4 |
| 55° | 918.8 | 904.0 | 898.0 | 882.8 | 879.1 |
| 57.5° | 767.2 | 757.2 | 755.5 | 740.7 | 739.2 |
| 60° | 674.9 | 669.4 | 669.3 | 656.0 | 656.0 |
| 62.5° | 596.3 | 592.2 | 595.2 | 586.4 | 585.0 |
| 65° | 493.4 | 489.8 | 495.3 | 491.6 | 491.6 |
| 67.5° | 412.2 | 412.2 | 415.6 | 414.0 | 414.0 |
| 70° | 366.8 | 366.8 | 368.7 | 368.7 | 368.7 |
| 72.5° | 325.9 | 324.5 | 329.3 | 329.3 | 327.8 |
| 75° | 266.6 | 266.6 | 266.6 | 268.5 | 268.5 |
| 77.5° | 207.6 | 208.0 | 209.5 | 209.1 | 207.6 |
| 80° | 168.3 | 170.1 | 170.2 | 168.3 | 168.3 |
| 82.5° | 128.9 | 130.8 | 130.8 | 130.4 | 128.9 |
| 85° | 68.1 | 71.8 | 75.6 | 75.6 | 75.6 |
| 87.5° | 20.8 | 28.9 | 37.0 | 37.5 | 36.0 |
| 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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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)