

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: P519602

Luminaire Tested: **SQ4-WB-150U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519602
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-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

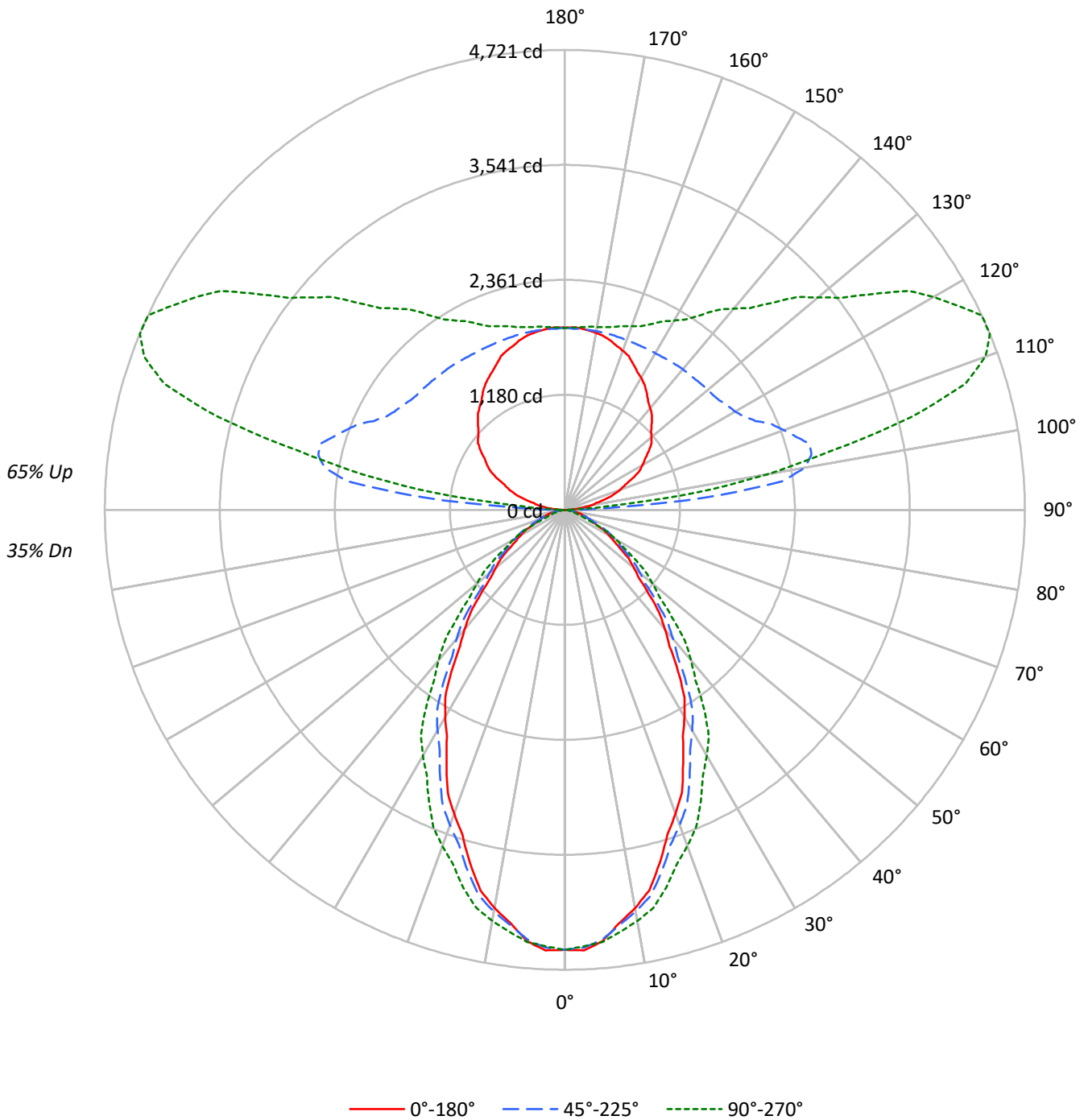
Lumens per Lamp: N/A
Luminaire Lumens: 18632.6 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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: P519602

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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 75 | 75 | 75 | 58 | 58 | 58 | 43 | 43 | 43 | 35 | | | | |
| 1 | 95 | 91 | 88 | 85 | 86 | 83 | 80 | 77 | 67 | 65 | 63 | 52 | 51 | 50 | 39 | 38 | 38 | 31 | | | | |
| 2 | 87 | 81 | 75 | 71 | 79 | 73 | 69 | 65 | 60 | 56 | 54 | 47 | 45 | 43 | 35 | 34 | 33 | 28 | | | | |
| 3 | 80 | 72 | 65 | 60 | 73 | 65 | 60 | 55 | 53 | 49 | 46 | 42 | 40 | 37 | 32 | 30 | 29 | 24 | | | | |
| 4 | 74 | 64 | 57 | 51 | 67 | 58 | 52 | 47 | 48 | 44 | 40 | 38 | 35 | 33 | 29 | 27 | 26 | 22 | | | | |
| 5 | 68 | 57 | 50 | 44 | 62 | 53 | 46 | 41 | 43 | 39 | 35 | 35 | 31 | 29 | 27 | 25 | 23 | 20 | | | | |
| 6 | 63 | 52 | 44 | 39 | 57 | 47 | 41 | 36 | 39 | 35 | 31 | 32 | 28 | 26 | 25 | 22 | 21 | 18 | | | | |
| 7 | 58 | 47 | 40 | 34 | 53 | 43 | 37 | 32 | 36 | 31 | 28 | 29 | 26 | 23 | 23 | 20 | 19 | 16 | | | | |
| 8 | 54 | 43 | 36 | 31 | 49 | 39 | 33 | 29 | 33 | 28 | 25 | 27 | 23 | 21 | 21 | 19 | 17 | 15 | | | | |
| 9 | 51 | 39 | 32 | 27 | 46 | 36 | 30 | 26 | 30 | 26 | 22 | 25 | 21 | 19 | 20 | 17 | 16 | 13 | | | | |
| 10 | 47 | 36 | 29 | 25 | 43 | 33 | 27 | 23 | 28 | 23 | 20 | 23 | 20 | 17 | 18 | 16 | 14 | 12 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 20833 | 20833 | 20833 |
| 5° | 20573 | 20500 | 20619 |
| 10° | 19437 | 19613 | 20068 |
| 15° | 17943 | 18360 | 19183 |
| 20° | 16294 | 16907 | 18026 |
| 25° | 14615 | 15412 | 16794 |
| 30° | 13068 | 13923 | 15517 |
| 35° | 11428 | 12253 | 14005 |
| 40° | 9618 | 10382 | 12124 |
| 45° | 7938 | 8623 | 10122 |
| 50° | 6627 | 7225 | 8433 |
| 55° | 5626 | 6199 | 6965 |
| 60° | 4809 | 5375 | 5558 |
| 65° | 3828 | 4521 | 3590 |
| 70° | 3395 | 3528 | 2192 |
| 75° | 3144 | 2861 | 1342 |
| 80° | 2896 | 2633 | 1158 |
| 85° | 2620 | 2414 | 942 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 414.2 | 2.2 |
| 10°-20° | 1077.4 | 5.8 |
| 20°-30° | 1395.6 | 7.5 |
| 30°-40° | 1366.6 | 7.3 |
| 40°-50° | 1046.1 | 5.6 |
| 50°-60° | 697.1 | 3.7 |
| 60°-70° | 380.4 | 2.0 |
| 70°-80° | 158.5 | 0.9 |
| 80°-90° | 48.8 | 0.3 |
| 90°-100° | 868.4 | 4.7 |
| 100°-110° | 2348.1 | 12.6 |
| 110°-120° | 2468.6 | 13.2 |
| 120°-130° | 2005.2 | 10.8 |
| 130°-140° | 1572.9 | 8.4 |
| 140°-150° | 1207.2 | 6.5 |
| 150°-160° | 868.2 | 4.7 |
| 160°-170° | 530.4 | 2.8 |
| 170°-180° | 178.8 | 1.0 |
| 0°-30° | 2887.3 | 15.5 |
| 0°-40° | 4253.9 | 22.8 |
| 0°-60° | 5997.0 | 32.2 |
| 0°-90° | 6584.7 | 35.3 |
| 90°-120° | 5685.1 | 30.5 |
| 90°-150° | 10470.5 | 56.2 |
| 90°-180° | 12048.0 | 64.7 |
| 0°-180° | 18632.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4516 | 4516 | 4516 | 4516 | 4516 | |
| 5° | 4443 | 4398 | 4427 | 4437 | 4453 | 413 |
| 15° | 3757 | 3744 | 3844 | 3949 | 4017 | 1049 |
| 25° | 2871 | 2879 | 3028 | 3160 | 3299 | 1320 |
| 35° | 2029 | 2039 | 2176 | 2322 | 2487 | 1262 |
| 45° | 1217 | 1240 | 1322 | 1422 | 1552 | 949 |
| 55° | 700 | 729 | 771 | 800 | 866 | 634 |
| 65° | 351 | 380 | 414 | 362 | 329 | 365 |
| 75° | 176 | 176 | 160 | 110 | 75 | 188 |
| 85° | 50 | 50 | 46 | 30 | 18 | 54 |
| 90° | 4 | 12 | 26 | 28 | 26 | 11 |
| 95° | 135 | 473 | 1444 | 747 | 444 | 141 |
| 105° | 436 | 674 | 2605 | 3842 | 3685 | 460 |
| 115° | 768 | 940 | 2160 | 4182 | 4721 | 759 |
| 125° | 1052 | 1205 | 1947 | 3286 | 3860 | 938 |
| 135° | 1261 | 1411 | 1895 | 2653 | 3003 | 975 |
| 145° | 1466 | 1576 | 1869 | 2271 | 2444 | 917 |
| 155° | 1655 | 1720 | 1853 | 2037 | 2104 | 764 |
| 165° | 1802 | 1820 | 1861 | 1933 | 1943 | 508 |
| 175° | 1871 | 1869 | 1863 | 1887 | 1883 | 178 |
| 180° | 1869 | 1869 | 1869 | 1869 | 1869 | |



TEST NUMBER: P519602

CATALOG NUMBER: SQ4-WB-150U-100D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4516.1 | 4516.1 | 4516.1 | 4516.1 | 4516.1 |
| 2.5° | 4527.2 | 4486.9 | 4497.1 | 4496.8 | 4484.4 |
| 5° | 4442.8 | 4398.2 | 4426.9 | 4437.2 | 4452.7 |
| 7.5° | 4277.9 | 4244.2 | 4296.5 | 4335.3 | 4366.7 |
| 10° | 4149.5 | 4120.4 | 4187.1 | 4243.6 | 4284.2 |
| 12.5° | 4000.5 | 3976.1 | 4058.7 | 4134.5 | 4187.5 |
| 15° | 3757.1 | 3743.6 | 3844.3 | 3948.9 | 4016.7 |
| 17.5° | 3496.8 | 3490.2 | 3605.7 | 3727.8 | 3814.6 |
| 20° | 3319.2 | 3317.3 | 3444.0 | 3571.2 | 3671.9 |
| 22.5° | 3140.1 | 3144.3 | 3277.6 | 3409.8 | 3524.5 |
| 25° | 2871.4 | 2879.1 | 3027.9 | 3159.9 | 3299.4 |
| 27.5° | 2622.9 | 2626.4 | 2780.2 | 2919.5 | 3068.3 |
| 30° | 2453.2 | 2462.9 | 2613.7 | 2758.0 | 2913.0 |
| 32.5° | 2283.6 | 2294.8 | 2442.5 | 2591.6 | 2749.7 |
| 35° | 2029.2 | 2038.9 | 2175.8 | 2322.2 | 2486.9 |
| 37.5° | 1766.8 | 1780.0 | 1901.6 | 2040.0 | 2202.0 |
| 40° | 1597.2 | 1616.6 | 1724.0 | 1854.4 | 2013.3 |
| 42.5° | 1433.9 | 1457.9 | 1557.5 | 1681.3 | 1824.7 |
| 45° | 1216.7 | 1240.0 | 1321.7 | 1421.8 | 1551.6 |
| 47.5° | 1029.6 | 1056.4 | 1119.2 | 1205.4 | 1316.2 |
| 50° | 923.4 | 948.6 | 1006.7 | 1070.5 | 1175.1 |
| 52.5° | 829.9 | 855.1 | 906.8 | 956.0 | 1045.1 |
| 55° | 699.5 | 728.6 | 770.8 | 800.1 | 866.0 |
| 57.5° | 592.5 | 620.4 | 653.9 | 667.1 | 707.0 |
| 60° | 521.2 | 552.2 | 582.6 | 581.1 | 602.4 |
| 62.5° | 456.2 | 482.5 | 512.8 | 491.9 | 493.0 |
| 65° | 350.7 | 379.8 | 414.2 | 361.9 | 328.9 |
| 67.5° | 283.4 | 289.6 | 325.0 | 252.4 | 213.2 |
| 70° | 251.7 | 251.7 | 261.6 | 195.4 | 162.5 |
| 72.5° | 221.5 | 221.5 | 212.4 | 158.9 | 124.4 |
| 75° | 176.4 | 176.4 | 160.5 | 110.2 | 75.3 |
| 77.5° | 135.9 | 134.4 | 122.9 | 82.2 | 54.7 |
| 80° | 109.0 | 109.0 | 99.1 | 64.9 | 43.6 |
| 82.5° | 85.2 | 85.2 | 76.9 | 50.7 | 32.5 |
| 85° | 49.5 | 49.5 | 45.6 | 29.5 | 17.8 |
| 87.5° | 18.2 | 19.8 | 21.1 | 15.1 | 13.2 |
| 90° | 4.0 | 11.9 | 26.1 | 28.1 | 26.1 |
| 92.5° | 57.1 | 208.2 | 410.7 | 178.3 | 129.1 |
| 95° | 134.8 | 473.1 | 1444.2 | 747.4 | 444.5 |
| 97.5° | 216.4 | 542.5 | 2251.2 | 1863.0 | 1368.2 |
| 100° | 277.6 | 570.6 | 2502.3 | 2609.6 | 2110.0 |
| 102.5° | 333.9 | 609.6 | 2590.8 | 3175.7 | 2802.0 |
| 105° | 436.5 | 674.5 | 2604.9 | 3842.4 | 3685.0 |
| 107.5° | 531.4 | 748.6 | 2491.0 | 4258.3 | 4310.6 |
| 110° | 605.5 | 802.1 | 2389.6 | 4369.9 | 4592.2 |

TEST NUMBER: P519602

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 671.4 | 855.5 | 2296.3 | 4347.6 | 4720.9 |
| 115° | 768.4 | 939.5 | 2160.3 | 4182.0 | 4720.9 |
| 117.5° | 863.3 | 1023.8 | 2070.6 | 3929.0 | 4539.9 |
| 120° | 921.3 | 1078.6 | 2017.5 | 3747.5 | 4370.9 |
| 122.5° | 976.0 | 1130.2 | 1985.3 | 3552.9 | 4181.0 |
| 125° | 1052.0 | 1205.4 | 1947.1 | 3285.7 | 3860.0 |
| 127.5° | 1122.0 | 1272.7 | 1924.6 | 3067.7 | 3572.8 |
| 130° | 1160.6 | 1316.0 | 1914.9 | 2933.0 | 3389.3 |
| 132.5° | 1200.8 | 1354.6 | 1905.3 | 2811.5 | 3231.6 |
| 135° | 1261.2 | 1410.7 | 1894.8 | 2653.0 | 3003.1 |
| 137.5° | 1321.9 | 1463.2 | 1886.0 | 2524.4 | 2809.6 |
| 140° | 1363.8 | 1495.5 | 1882.7 | 2441.7 | 2695.4 |
| 142.5° | 1404.0 | 1527.9 | 1876.3 | 2366.9 | 2589.2 |
| 145° | 1466.4 | 1576.5 | 1868.7 | 2270.9 | 2443.9 |
| 147.5° | 1523.1 | 1620.6 | 1859.8 | 2183.9 | 2316.8 |
| 150° | 1564.9 | 1651.5 | 1856.6 | 2136.6 | 2242.8 |
| 152.5° | 1603.5 | 1679.1 | 1855.0 | 2092.7 | 2180.0 |
| 155° | 1655.4 | 1720.3 | 1852.6 | 2037.1 | 2104.0 |
| 157.5° | 1709.3 | 1754.6 | 1853.0 | 1998.4 | 2042.4 |
| 160° | 1739.9 | 1777.3 | 1854.6 | 1974.0 | 2005.4 |
| 162.5° | 1764.1 | 1795.1 | 1856.2 | 1954.5 | 1978.1 |
| 165° | 1802.3 | 1820.0 | 1860.6 | 1933.2 | 1943.1 |
| 167.5° | 1828.4 | 1840.6 | 1861.0 | 1915.0 | 1919.7 |
| 170° | 1844.5 | 1850.4 | 1862.6 | 1906.9 | 1906.9 |
| 172.5° | 1857.4 | 1858.6 | 1862.6 | 1897.2 | 1895.6 |
| 175° | 1870.7 | 1868.7 | 1862.6 | 1886.7 | 1882.7 |
| 177.5° | 1875.1 | 1870.4 | 1862.2 | 1878.2 | 1873.5 |
| 180° | 1868.7 | 1868.7 | 1868.7 | 1868.7 | 1868.7 |

(END OF REPORT)