

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: P519868

Luminaire Tested: **SQ4-F-025U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519868
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-025U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

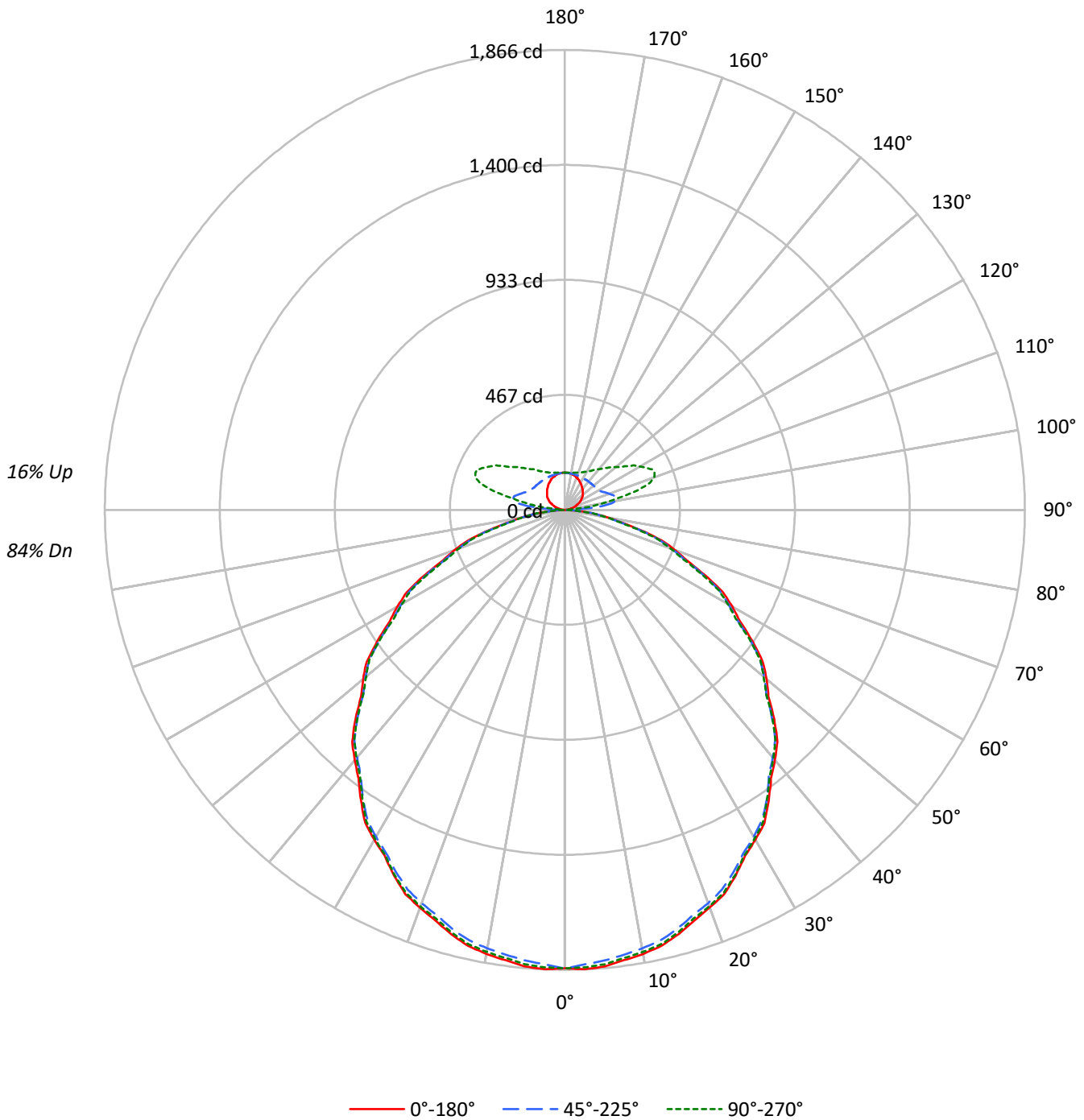
Lumens per Lamp: N/A
Luminaire Lumens: 6051.3 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 49.5
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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 102 | 102 | 102 | 94 | 94 | 94 | 87 | 87 | 87 | 84 | | | | |
| 1 | 105 | 101 | 97 | 93 | 101 | 97 | 93 | 90 | 90 | 87 | 84 | 83 | 81 | 79 | 77 | 75 | 74 | 71 | | | | |
| 2 | 96 | 88 | 81 | 76 | 92 | 85 | 79 | 74 | 79 | 74 | 70 | 73 | 69 | 66 | 68 | 65 | 62 | 59 | | | | |
| 3 | 87 | 77 | 69 | 63 | 84 | 74 | 67 | 62 | 69 | 63 | 58 | 64 | 60 | 55 | 60 | 56 | 53 | 50 | | | | |
| 4 | 80 | 68 | 60 | 53 | 77 | 66 | 58 | 52 | 62 | 55 | 50 | 57 | 52 | 47 | 53 | 49 | 45 | 43 | | | | |
| 5 | 74 | 61 | 52 | 46 | 70 | 59 | 51 | 45 | 55 | 48 | 43 | 52 | 46 | 41 | 48 | 43 | 39 | 37 | | | | |
| 6 | 68 | 55 | 46 | 40 | 65 | 53 | 45 | 39 | 50 | 43 | 38 | 47 | 41 | 36 | 44 | 39 | 35 | 32 | | | | |
| 7 | 63 | 50 | 41 | 35 | 60 | 48 | 40 | 35 | 45 | 38 | 33 | 42 | 36 | 32 | 40 | 35 | 31 | 28 | | | | |
| 8 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 41 | 35 | 30 | 39 | 33 | 29 | 37 | 31 | 27 | 25 | | | | |
| 9 | 55 | 42 | 34 | 28 | 52 | 40 | 33 | 28 | 38 | 31 | 27 | 36 | 30 | 26 | 34 | 29 | 25 | 23 | | | | |
| 10 | 51 | 38 | 31 | 25 | 49 | 37 | 30 | 25 | 35 | 29 | 24 | 33 | 27 | 23 | 31 | 26 | 23 | 21 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17162 | 17162 | 17162 |
| 5° | 17218 | 16999 | 17142 |
| 10° | 17139 | 16928 | 17062 |
| 15° | 17024 | 16819 | 16955 |
| 20° | 16866 | 16675 | 16805 |
| 25° | 16674 | 16497 | 16633 |
| 30° | 16468 | 16326 | 16413 |
| 35° | 16235 | 16096 | 16109 |
| 40° | 15967 | 15794 | 15843 |
| 45° | 15668 | 15494 | 15522 |
| 50° | 15325 | 15150 | 15104 |
| 55° | 14935 | 14721 | 14689 |
| 60° | 14450 | 14129 | 14055 |
| 65° | 13701 | 13409 | 13232 |
| 70° | 12757 | 12425 | 12263 |
| 75° | 11347 | 11097 | 10765 |
| 80° | 9245 | 8979 | 8921 |
| 85° | 5526 | 6288 | 6288 |



TEST NUMBER: P519868

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 175.5 | 2.9 |
| 10°-20° | 499.8 | 8.3 |
| 20°-30° | 751.0 | 12.4 |
| 30°-40° | 896.0 | 14.8 |
| 40°-50° | 918.5 | 15.2 |
| 50°-60° | 818.6 | 13.5 |
| 60°-70° | 609.4 | 10.1 |
| 70°-80° | 330.2 | 5.5 |
| 80°-90° | 76.6 | 1.3 |
| 90°-100° | 73.4 | 1.2 |
| 100°-110° | 192.9 | 3.2 |
| 110°-120° | 200.0 | 3.3 |
| 120°-130° | 160.4 | 2.7 |
| 130°-140° | 125.9 | 2.1 |
| 140°-150° | 96.6 | 1.6 |
| 150°-160° | 69.6 | 1.1 |
| 160°-170° | 42.6 | 0.7 |
| 170°-180° | 14.4 | 0.2 |
| 0°-30° | 1426.3 | 23.6 |
| 0°-40° | 2322.4 | 38.4 |
| 0°-60° | 4059.5 | 67.1 |
| 0°-90° | 5075.7 | 83.9 |
| 90°-120° | 466.2 | 7.7 |
| 90°-150° | 849.1 | 14.0 |
| 90°-180° | 976.0 | 16.1 |
| 0°-180° | 6051.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1860 | 1860 | 1860 | 1860 | 1860 | |
| 5° | 1859 | 1856 | 1836 | 1852 | 1851 | 176 |
| 15° | 1782 | 1778 | 1761 | 1776 | 1775 | 502 |
| 25° | 1638 | 1635 | 1620 | 1630 | 1634 | 754 |
| 35° | 1441 | 1440 | 1429 | 1429 | 1430 | 901 |
| 45° | 1201 | 1198 | 1188 | 1186 | 1190 | 925 |
| 55° | 928 | 926 | 915 | 908 | 913 | 829 |
| 65° | 628 | 624 | 614 | 610 | 606 | 621 |
| 75° | 318 | 318 | 311 | 305 | 302 | 338 |
| 85° | 52 | 59 | 59 | 60 | 59 | 72 |
| 90° | 1 | 3 | 8 | 4 | 4 | 2 |
| 95° | 10 | 38 | 126 | 65 | 44 | 11 |
| 105° | 35 | 53 | 213 | 324 | 302 | 37 |
| 115° | 62 | 75 | 171 | 341 | 389 | 61 |
| 125° | 86 | 96 | 155 | 263 | 310 | 76 |
| 135° | 102 | 113 | 150 | 212 | 240 | 79 |
| 145° | 119 | 126 | 149 | 181 | 195 | 74 |
| 155° | 134 | 138 | 149 | 163 | 168 | 62 |
| 165° | 145 | 147 | 149 | 154 | 156 | 41 |
| 175° | 150 | 150 | 150 | 152 | 152 | 14 |
| 180° | 150 | 150 | 150 | 150 | 150 | |



TEST NUMBER: P519868

CATALOG NUMBER: SQ4-F-025U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1860.1 | 1860.1 | 1860.1 | 1860.1 | 1860.1 |
| 2.5° | 1865.8 | 1862.6 | 1846.1 | 1860.0 | 1857.7 |
| 5° | 1859.1 | 1856.1 | 1835.5 | 1851.9 | 1850.9 |
| 7.5° | 1843.3 | 1839.5 | 1820.8 | 1836.1 | 1834.3 |
| 10° | 1829.4 | 1826.4 | 1806.9 | 1822.2 | 1821.2 |
| 12.5° | 1812.2 | 1809.1 | 1789.7 | 1805.0 | 1804.8 |
| 15° | 1782.3 | 1778.3 | 1760.8 | 1776.1 | 1775.1 |
| 17.5° | 1746.5 | 1741.8 | 1724.6 | 1736.7 | 1738.7 |
| 20° | 1717.8 | 1714.8 | 1698.4 | 1709.6 | 1711.6 |
| 22.5° | 1688.3 | 1684.5 | 1667.2 | 1680.2 | 1682.1 |
| 25° | 1637.9 | 1634.9 | 1620.5 | 1629.8 | 1633.9 |
| 27.5° | 1582.7 | 1582.7 | 1569.3 | 1575.9 | 1578.4 |
| 30° | 1545.8 | 1545.8 | 1532.5 | 1536.7 | 1540.6 |
| 32.5° | 1506.5 | 1503.2 | 1490.8 | 1494.1 | 1498.1 |
| 35° | 1441.4 | 1440.4 | 1429.1 | 1429.2 | 1430.2 |
| 37.5° | 1374.0 | 1371.2 | 1358.9 | 1359.8 | 1364.6 |
| 40° | 1325.7 | 1323.8 | 1311.4 | 1311.5 | 1315.4 |
| 42.5° | 1276.5 | 1274.6 | 1263.9 | 1262.2 | 1263.9 |
| 45° | 1200.8 | 1197.8 | 1187.5 | 1185.5 | 1189.6 |
| 47.5° | 1120.1 | 1121.0 | 1108.7 | 1105.8 | 1108.1 |
| 50° | 1067.7 | 1067.7 | 1055.5 | 1049.4 | 1052.3 |
| 52.5° | 1012.9 | 1011.3 | 998.9 | 992.1 | 999.1 |
| 55° | 928.5 | 925.5 | 915.2 | 908.1 | 913.2 |
| 57.5° | 842.1 | 837.5 | 827.1 | 819.4 | 822.3 |
| 60° | 783.1 | 776.2 | 765.7 | 759.6 | 761.7 |
| 62.5° | 721.7 | 717.9 | 706.7 | 697.5 | 701.9 |
| 65° | 627.6 | 623.5 | 614.2 | 610.0 | 606.1 |
| 67.5° | 535.2 | 532.6 | 522.1 | 517.7 | 515.2 |
| 70° | 472.9 | 467.9 | 460.6 | 455.6 | 454.6 |
| 72.5° | 412.4 | 406.5 | 399.2 | 394.9 | 392.3 |
| 75° | 318.3 | 318.3 | 311.3 | 305.0 | 302.0 |
| 77.5° | 228.9 | 229.7 | 223.8 | 221.7 | 220.3 |
| 80° | 174.0 | 174.0 | 169.0 | 166.9 | 167.9 |
| 82.5° | 121.6 | 124.1 | 122.2 | 119.3 | 118.0 |
| 85° | 52.2 | 59.2 | 59.4 | 60.4 | 59.4 |
| 87.5° | 9.2 | 15.2 | 17.2 | 14.7 | 13.1 |
| 90° | 1.0 | 2.9 | 7.7 | 3.8 | 3.8 |
| 92.5° | 4.0 | 19.5 | 43.2 | 19.1 | 12.3 |
| 95° | 9.7 | 37.9 | 126.4 | 65.1 | 44.4 |
| 97.5° | 16.8 | 41.7 | 189.2 | 150.4 | 110.8 |
| 100° | 22.2 | 44.8 | 208.4 | 211.2 | 164.0 |
| 102.5° | 26.9 | 48.0 | 213.8 | 263.1 | 222.7 |
| 105° | 34.7 | 52.7 | 213.3 | 323.7 | 302.1 |
| 107.5° | 42.8 | 59.5 | 201.1 | 355.2 | 360.5 |
| 110° | 48.3 | 63.4 | 191.1 | 363.3 | 386.0 |

TEST NUMBER: P519868

CATALOG NUMBER: SQ4-F-025U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 53.6 | 68.0 | 181.8 | 358.2 | 393.0 |
| 115° | 61.7 | 74.9 | 170.8 | 340.8 | 388.8 |
| 117.5° | 69.7 | 81.7 | 163.3 | 316.6 | 369.9 |
| 120° | 74.3 | 85.6 | 160.2 | 300.3 | 352.2 |
| 122.5° | 79.0 | 90.2 | 157.8 | 284.1 | 335.2 |
| 125° | 85.8 | 96.3 | 155.3 | 262.6 | 309.7 |
| 127.5° | 91.5 | 102.1 | 153.2 | 245.2 | 285.0 |
| 130° | 94.5 | 105.9 | 152.5 | 234.4 | 271.2 |
| 132.5° | 97.7 | 109.0 | 151.7 | 225.0 | 258.0 |
| 135° | 102.3 | 112.7 | 150.5 | 211.9 | 240.3 |
| 137.5° | 107.1 | 117.3 | 150.4 | 202.2 | 225.4 |
| 140° | 111.0 | 120.4 | 149.6 | 194.4 | 216.1 |
| 142.5° | 114.0 | 122.7 | 149.6 | 189.0 | 207.6 |
| 145° | 118.7 | 126.3 | 148.6 | 180.8 | 194.9 |
| 147.5° | 123.3 | 130.7 | 148.6 | 174.0 | 185.6 |
| 150° | 126.4 | 133.0 | 148.6 | 170.0 | 179.5 |
| 152.5° | 129.5 | 134.6 | 148.6 | 166.9 | 174.1 |
| 155° | 134.1 | 137.9 | 148.6 | 163.2 | 167.8 |
| 157.5° | 137.5 | 141.2 | 148.6 | 159.8 | 163.3 |
| 160° | 139.9 | 142.7 | 148.6 | 158.3 | 160.2 |
| 162.5° | 142.2 | 144.3 | 148.6 | 156.8 | 158.7 |
| 165° | 144.7 | 146.6 | 148.6 | 154.5 | 156.3 |
| 167.5° | 147.0 | 148.0 | 149.6 | 153.4 | 154.2 |
| 170° | 148.6 | 149.5 | 149.6 | 153.4 | 153.4 |
| 172.5° | 149.4 | 149.6 | 149.6 | 152.7 | 151.9 |
| 175° | 150.5 | 150.5 | 149.6 | 151.5 | 151.5 |
| 177.5° | 150.5 | 150.5 | 149.8 | 151.3 | 150.5 |
| 180° | 150.5 | 150.5 | 150.5 | 150.5 | 150.5 |

(END OF REPORT)