

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: P564325

Luminaire Tested: **SQ4-PR1-100U-125D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564325
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PR1-100U-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

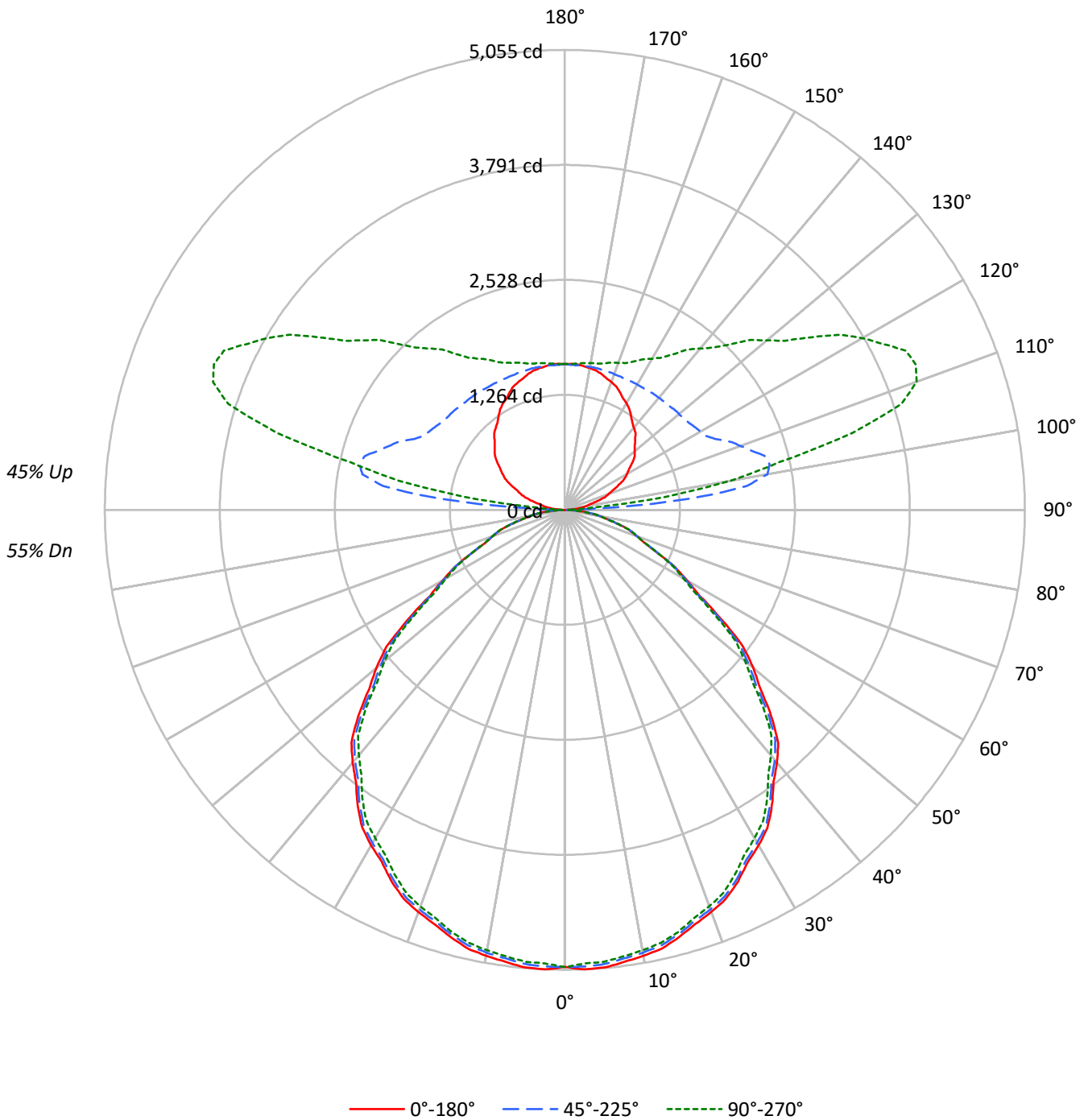
Lumens per Lamp: N/A
Luminaire Lumens: 22979.0 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 214.8
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 | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 86 | 86 | 86 | 73 | 73 | 73 | 60 | 60 | 60 | 55 |
| 1 | 99 | 95 | 91 | 88 | 92 | 88 | 85 | 82 | 76 | 73 | 71 | 64 | 63 | 61 | 54 | 53 | 52 | 47 |
| 2 | 91 | 83 | 77 | 72 | 84 | 78 | 72 | 68 | 67 | 63 | 60 | 57 | 54 | 52 | 48 | 46 | 44 | 40 |
| 3 | 83 | 73 | 66 | 60 | 77 | 69 | 62 | 57 | 59 | 54 | 50 | 51 | 47 | 44 | 43 | 40 | 38 | 34 |
| 4 | 76 | 65 | 57 | 51 | 70 | 61 | 54 | 49 | 53 | 47 | 43 | 45 | 41 | 38 | 38 | 35 | 33 | 29 |
| 5 | 70 | 58 | 50 | 44 | 65 | 54 | 47 | 42 | 47 | 42 | 37 | 41 | 36 | 33 | 35 | 31 | 29 | 26 |
| 6 | 64 | 52 | 44 | 38 | 60 | 49 | 42 | 37 | 43 | 37 | 33 | 37 | 32 | 29 | 31 | 28 | 25 | 23 |
| 7 | 60 | 47 | 39 | 34 | 55 | 44 | 37 | 32 | 39 | 33 | 29 | 34 | 29 | 26 | 29 | 25 | 23 | 20 |
| 8 | 55 | 43 | 35 | 30 | 51 | 40 | 33 | 29 | 35 | 30 | 26 | 31 | 26 | 23 | 26 | 23 | 20 | 18 |
| 9 | 51 | 39 | 32 | 27 | 48 | 37 | 30 | 26 | 33 | 27 | 23 | 28 | 24 | 21 | 24 | 21 | 18 | 16 |
| 10 | 48 | 36 | 29 | 24 | 45 | 34 | 27 | 23 | 30 | 25 | 21 | 26 | 22 | 19 | 23 | 19 | 17 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15451 | 15451 | 15451 |
| 5° | 15590 | 15470 | 15390 |
| 10° | 15541 | 15432 | 15352 |
| 15° | 15472 | 15376 | 15293 |
| 20° | 15394 | 15295 | 15182 |
| 25° | 15286 | 15183 | 15007 |
| 30° | 15121 | 15014 | 14798 |
| 35° | 14898 | 14768 | 14557 |
| 40° | 14558 | 14402 | 14142 |
| 45° | 13965 | 13720 | 13438 |
| 50° | 12920 | 12609 | 12360 |
| 55° | 11276 | 11021 | 10789 |
| 60° | 9502 | 9422 | 9236 |
| 65° | 8219 | 8251 | 8187 |
| 70° | 7549 | 7587 | 7587 |
| 75° | 7251 | 7251 | 7302 |
| 80° | 6820 | 6898 | 6820 |
| 85° | 5498 | 6108 | 6108 |



TEST NUMBER: P564325

CATALOG NUMBER: SQ4-PR1-100U-125D-940-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 475.1 | 2.1 |
| 10°-20° | 1359.3 | 5.9 |
| 20°-30° | 2050.3 | 8.9 |
| 30°-40° | 2442.9 | 10.6 |
| 40°-50° | 2408.5 | 10.5 |
| 50°-60° | 1840.7 | 8.0 |
| 60°-70° | 1139.1 | 5.0 |
| 70°-80° | 647.0 | 2.8 |
| 80°-90° | 200.1 | 0.9 |
| 90°-100° | 750.7 | 3.3 |
| 100°-110° | 2072.5 | 9.0 |
| 110°-120° | 2137.5 | 9.3 |
| 120°-130° | 1717.6 | 7.5 |
| 130°-140° | 1349.9 | 5.9 |
| 140°-150° | 1035.3 | 4.5 |
| 150°-160° | 744.1 | 3.2 |
| 160°-170° | 455.0 | 2.0 |
| 170°-180° | 153.4 | 0.7 |
| 0°-30° | 3884.7 | 16.9 |
| 0°-40° | 6327.6 | 27.5 |
| 0°-60° | 10576.7 | 46.0 |
| 0°-90° | 12562.9 | 54.7 |
| 90°-120° | 4960.7 | 21.6 |
| 90°-150° | 9063.6 | 39.4 |
| 90°-180° | 10416.0 | 45.3 |
| 0°-180° | 22979.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 5024 | 5024 | 5024 | 5024 | 5024 | |
| 5° | 5050 | 4995 | 5011 | 4994 | 4985 | 479 |
| 15° | 4860 | 4809 | 4829 | 4812 | 4803 | 1371 |
| 25° | 4505 | 4450 | 4474 | 4427 | 4423 | 2073 |
| 35° | 3968 | 3922 | 3934 | 3882 | 3877 | 2477 |
| 45° | 3211 | 3169 | 3155 | 3098 | 3090 | 2460 |
| 55° | 2103 | 2069 | 2056 | 2021 | 2012 | 1884 |
| 65° | 1129 | 1121 | 1134 | 1125 | 1125 | 1144 |
| 75° | 610 | 610 | 610 | 614 | 614 | 644 |
| 85° | 156 | 164 | 173 | 173 | 173 | 181 |
| 90° | 5 | 10 | 20 | 23 | 26 | 14 |
| 95° | 110 | 406 | 1362 | 560 | 364 | 118 |
| 105° | 369 | 570 | 2280 | 3481 | 3278 | 393 |
| 115° | 662 | 800 | 1836 | 3636 | 4135 | 650 |
| 125° | 908 | 1033 | 1665 | 2817 | 3306 | 808 |
| 135° | 1093 | 1210 | 1618 | 2282 | 2573 | 845 |
| 145° | 1267 | 1355 | 1598 | 1942 | 2090 | 793 |
| 155° | 1429 | 1476 | 1585 | 1743 | 1798 | 658 |
| 165° | 1547 | 1567 | 1593 | 1655 | 1667 | 436 |
| 175° | 1603 | 1606 | 1595 | 1618 | 1613 | 152 |
| 180° | 1603 | 1603 | 1603 | 1603 | 1603 | |

TEST NUMBER: P564325

CATALOG NUMBER: SQ4-PR1-100U-125D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 5024.1 | 5024.1 | 5024.1 | 5024.1 | 5024.1 |
| 2.5° | 5055.2 | 5011.2 | 5024.1 | 5013.1 | 4989.4 |
| 5° | 5050.0 | 4995.0 | 5011.1 | 4993.6 | 4985.1 |
| 7.5° | 5011.1 | 4956.9 | 4973.0 | 4955.6 | 4950.5 |
| 10° | 4976.5 | 4925.7 | 4941.8 | 4924.3 | 4915.9 |
| 12.5° | 4938.4 | 4884.2 | 4903.8 | 4882.8 | 4874.3 |
| 15° | 4859.6 | 4808.8 | 4829.3 | 4811.8 | 4803.4 |
| 17.5° | 4773.1 | 4718.9 | 4739.3 | 4719.2 | 4708.2 |
| 20° | 4703.8 | 4653.1 | 4673.5 | 4643.2 | 4638.9 |
| 22.5° | 4627.7 | 4576.9 | 4597.4 | 4556.7 | 4555.8 |
| 25° | 4504.8 | 4449.8 | 4474.5 | 4426.8 | 4422.6 |
| 27.5° | 4358.5 | 4307.7 | 4328.2 | 4279.6 | 4274.6 |
| 30° | 4258.1 | 4207.3 | 4227.8 | 4175.7 | 4167.2 |
| 32.5° | 4143.9 | 4096.5 | 4113.6 | 4061.5 | 4056.5 |
| 35° | 3968.2 | 3921.6 | 3933.6 | 3881.5 | 3877.3 |
| 37.5° | 3768.3 | 3725.9 | 3732.8 | 3675.6 | 3671.3 |
| 40° | 3626.3 | 3584.0 | 3587.4 | 3526.7 | 3522.5 |
| 42.5° | 3470.5 | 3428.2 | 3424.7 | 3364.0 | 3359.8 |
| 45° | 3210.9 | 3168.6 | 3154.6 | 3098.2 | 3089.7 |
| 47.5° | 2914.9 | 2872.6 | 2846.5 | 2800.5 | 2794.6 |
| 50° | 2700.3 | 2658.0 | 2635.4 | 2596.1 | 2583.4 |
| 52.5° | 2468.3 | 2426.0 | 2406.9 | 2371.1 | 2358.4 |
| 55° | 2103.1 | 2069.2 | 2055.5 | 2020.7 | 2012.2 |
| 57.5° | 1756.0 | 1733.2 | 1729.2 | 1695.4 | 1692.0 |
| 60° | 1544.9 | 1532.2 | 1531.9 | 1501.6 | 1501.6 |
| 62.5° | 1364.8 | 1355.5 | 1362.3 | 1342.3 | 1338.9 |
| 65° | 1129.4 | 1121.0 | 1133.8 | 1125.1 | 1125.1 |
| 67.5° | 943.4 | 943.4 | 951.2 | 947.7 | 947.7 |
| 70° | 839.5 | 839.5 | 843.8 | 843.8 | 843.8 |
| 72.5° | 746.0 | 742.7 | 753.8 | 753.7 | 750.4 |
| 75° | 610.2 | 610.2 | 610.2 | 614.5 | 614.5 |
| 77.5° | 475.1 | 476.0 | 479.5 | 478.5 | 475.1 |
| 80° | 385.1 | 389.4 | 389.5 | 385.1 | 385.1 |
| 82.5° | 295.1 | 299.4 | 299.5 | 298.5 | 295.1 |
| 85° | 155.8 | 164.2 | 173.1 | 173.1 | 173.1 |
| 87.5° | 46.0 | 60.6 | 73.3 | 73.8 | 70.9 |
| 90° | 5.1 | 10.1 | 20.5 | 23.1 | 25.6 |
| 92.5° | 46.2 | 191.6 | 342.7 | 125.1 | 97.5 |
| 95° | 110.3 | 406.2 | 1362.0 | 559.8 | 364.2 |
| 97.5° | 182.6 | 455.0 | 2017.6 | 1553.3 | 1125.0 |
| 100° | 236.0 | 484.3 | 2259.7 | 2275.7 | 1849.3 |
| 102.5° | 287.3 | 517.5 | 2306.9 | 2811.8 | 2407.5 |
| 105° | 369.4 | 570.0 | 2280.2 | 3481.2 | 3278.0 |
| 107.5° | 456.6 | 635.1 | 2153.0 | 3804.0 | 3878.2 |
| 110° | 518.1 | 678.6 | 2054.5 | 3873.4 | 4114.2 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 573.5 | 728.0 | 1962.2 | 3818.6 | 4173.7 |
| 115° | 661.8 | 799.7 | 1836.5 | 3635.6 | 4134.7 |
| 117.5° | 738.7 | 876.1 | 1753.9 | 3378.1 | 3945.9 |
| 120° | 790.0 | 925.4 | 1721.1 | 3203.8 | 3775.6 |
| 122.5° | 839.3 | 968.7 | 1694.4 | 3041.0 | 3582.7 |
| 125° | 908.0 | 1033.4 | 1664.7 | 2817.2 | 3306.2 |
| 127.5° | 966.5 | 1091.9 | 1647.2 | 2627.9 | 3049.7 |
| 130° | 1005.5 | 1130.9 | 1639.0 | 2512.1 | 2895.8 |
| 132.5° | 1042.4 | 1161.8 | 1630.8 | 2414.9 | 2762.5 |
| 135° | 1092.7 | 1210.5 | 1618.5 | 2281.7 | 2572.7 |
| 137.5° | 1149.1 | 1256.4 | 1612.3 | 2170.0 | 2418.2 |
| 140° | 1179.9 | 1285.2 | 1608.2 | 2095.4 | 2313.6 |
| 142.5° | 1214.8 | 1312.1 | 1604.1 | 2029.1 | 2221.3 |
| 145° | 1267.1 | 1354.9 | 1598.0 | 1942.5 | 2090.4 |
| 147.5° | 1317.4 | 1394.1 | 1592.3 | 1869.4 | 1984.2 |
| 150° | 1354.3 | 1417.0 | 1590.3 | 1825.8 | 1918.6 |
| 152.5° | 1383.0 | 1441.7 | 1588.2 | 1788.5 | 1865.2 |
| 155° | 1428.7 | 1476.3 | 1585.1 | 1742.9 | 1798.0 |
| 157.5° | 1470.7 | 1507.4 | 1585.7 | 1709.6 | 1747.2 |
| 160° | 1495.4 | 1528.0 | 1587.7 | 1690.9 | 1718.5 |
| 162.5° | 1515.9 | 1544.5 | 1589.8 | 1674.4 | 1695.9 |
| 165° | 1546.7 | 1566.7 | 1592.8 | 1654.7 | 1667.2 |
| 167.5° | 1570.3 | 1582.3 | 1595.4 | 1642.7 | 1646.7 |
| 170° | 1582.6 | 1592.6 | 1595.4 | 1636.4 | 1636.4 |
| 172.5° | 1592.8 | 1598.9 | 1595.4 | 1628.2 | 1626.2 |
| 175° | 1603.1 | 1605.6 | 1595.4 | 1618.4 | 1613.4 |
| 177.5° | 1607.2 | 1605.2 | 1594.9 | 1609.2 | 1605.1 |
| 180° | 1603.1 | 1603.1 | 1603.1 | 1603.1 | 1603.1 |

(END OF REPORT)