

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: P564021

Luminaire Tested: **SQ4-PR1-050U-125D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564021
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PR1-050U-125D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

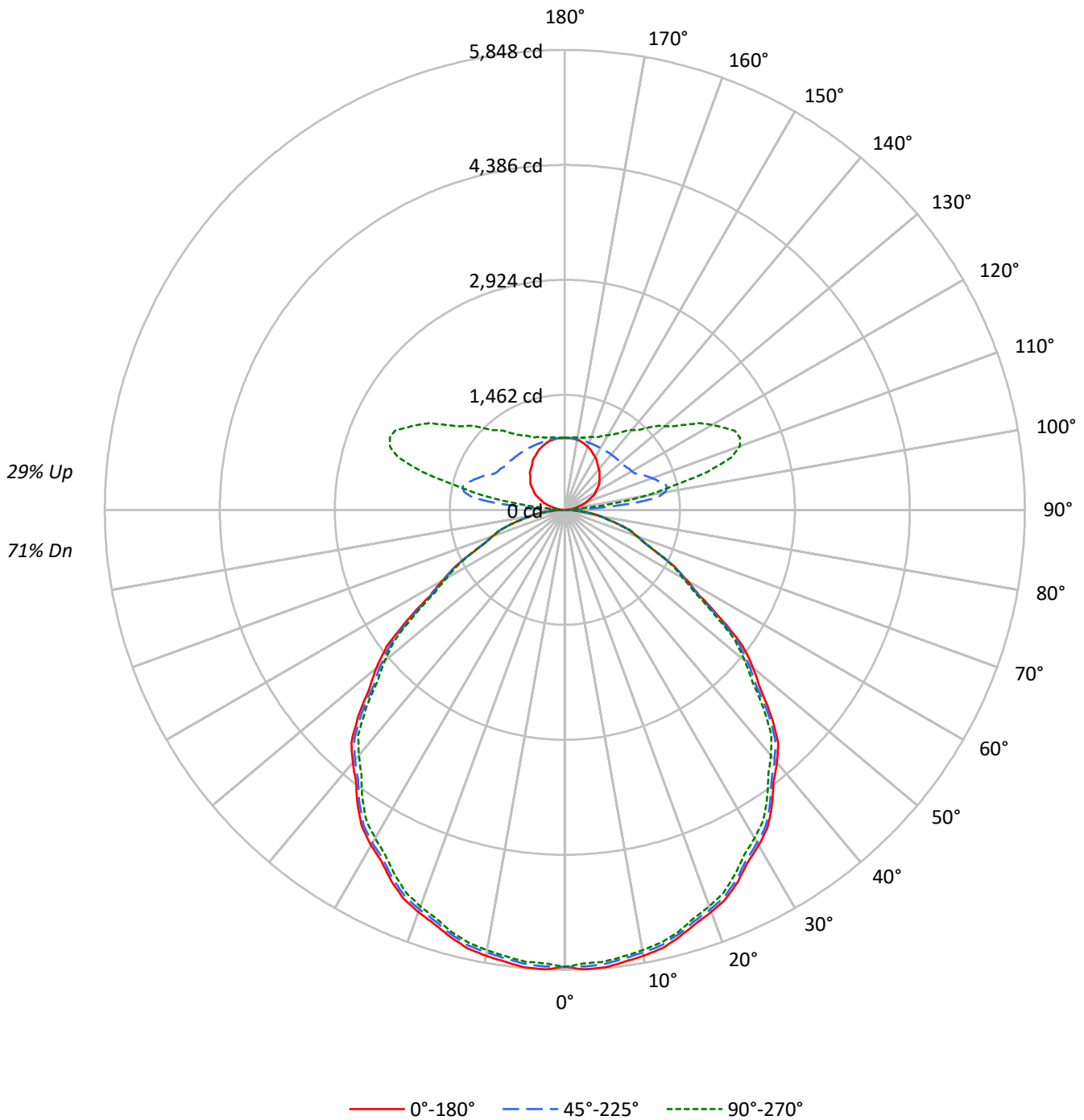
Lumens per Lamp: N/A
Luminaire Lumens: 20507.7 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 167
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: P564021

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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 | 112 | 112 | 112 | 112 | 106 | 106 | 106 | 106 | 95 | 95 | 95 | 85 | 85 | 85 | 75 | 75 | 75 | 75 | 75 | 75 | 71 | |
| 1 | 103 | 99 | 95 | 91 | 97 | 93 | 90 | 87 | 84 | 81 | 79 | 75 | 73 | 71 | 67 | 66 | 64 | 64 | 64 | 64 | 60 | |
| 2 | 94 | 87 | 80 | 75 | 89 | 82 | 77 | 72 | 74 | 70 | 66 | 67 | 63 | 60 | 60 | 57 | 55 | 55 | 55 | 55 | 51 | |
| 3 | 86 | 77 | 69 | 63 | 81 | 73 | 66 | 61 | 66 | 60 | 56 | 59 | 55 | 52 | 53 | 50 | 47 | 47 | 47 | 47 | 44 | |
| 4 | 79 | 68 | 60 | 54 | 75 | 65 | 58 | 52 | 59 | 53 | 48 | 53 | 48 | 45 | 48 | 44 | 41 | 41 | 41 | 41 | 38 | |
| 5 | 73 | 61 | 53 | 47 | 69 | 58 | 51 | 45 | 53 | 47 | 42 | 48 | 43 | 39 | 43 | 39 | 36 | 36 | 36 | 36 | 33 | |
| 6 | 67 | 55 | 47 | 41 | 63 | 52 | 45 | 39 | 48 | 41 | 37 | 43 | 38 | 34 | 39 | 35 | 32 | 32 | 32 | 32 | 29 | |
| 7 | 62 | 50 | 42 | 36 | 59 | 48 | 40 | 35 | 43 | 37 | 33 | 40 | 34 | 30 | 36 | 32 | 28 | 28 | 28 | 28 | 26 | |
| 8 | 58 | 45 | 37 | 32 | 55 | 43 | 36 | 31 | 40 | 34 | 29 | 36 | 31 | 27 | 33 | 29 | 25 | 25 | 25 | 25 | 23 | |
| 9 | 54 | 41 | 34 | 29 | 51 | 40 | 33 | 28 | 37 | 30 | 26 | 33 | 28 | 25 | 31 | 26 | 23 | 23 | 23 | 23 | 21 | |
| 10 | 51 | 38 | 31 | 26 | 48 | 37 | 30 | 25 | 34 | 28 | 24 | 31 | 26 | 22 | 28 | 24 | 21 | 21 | 21 | 21 | 19 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17873 | 17873 | 17873 |
| 5° | 18034 | 17895 | 17802 |
| 10° | 17977 | 17852 | 17758 |
| 15° | 17898 | 17786 | 17691 |
| 20° | 17808 | 17693 | 17562 |
| 25° | 17683 | 17564 | 17360 |
| 30° | 17492 | 17367 | 17118 |
| 35° | 17233 | 17083 | 16839 |
| 40° | 16841 | 16660 | 16358 |
| 45° | 16154 | 15871 | 15545 |
| 50° | 14945 | 14585 | 14298 |
| 55° | 13044 | 12749 | 12481 |
| 60° | 10991 | 10899 | 10684 |
| 65° | 9507 | 9544 | 9471 |
| 70° | 8732 | 8777 | 8777 |
| 75° | 8387 | 8387 | 8446 |
| 80° | 7890 | 7979 | 7890 |
| 85° | 6359 | 7064 | 7064 |



TEST NUMBER: P564021

CATALOG NUMBER: SQ4-PR1-050U-125D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 549.6 | 2.7 |
| 10°-20° | 1572.4 | 7.7 |
| 20°-30° | 2371.7 | 11.6 |
| 30°-40° | 2825.8 | 13.8 |
| 40°-50° | 2786.0 | 13.6 |
| 50°-60° | 2129.2 | 10.4 |
| 60°-70° | 1317.6 | 6.4 |
| 70°-80° | 748.4 | 3.6 |
| 80°-90° | 231.2 | 1.1 |
| 90°-100° | 439.4 | 2.1 |
| 100°-110° | 1193.5 | 5.8 |
| 110°-120° | 1227.1 | 6.0 |
| 120°-130° | 981.1 | 4.8 |
| 130°-140° | 770.9 | 3.8 |
| 140°-150° | 591.1 | 2.9 |
| 150°-160° | 425.1 | 2.1 |
| 160°-170° | 260.0 | 1.3 |
| 170°-180° | 87.6 | 0.4 |
| 0°-30° | 4493.6 | 21.9 |
| 0°-40° | 7319.5 | 35.7 |
| 0°-60° | 12234.8 | 59.7 |
| 0°-90° | 14532.0 | 70.9 |
| 90°-120° | 2860.0 | 13.9 |
| 90°-150° | 5203.1 | 25.4 |
| 90°-180° | 5976.0 | 29.1 |
| 0°-180° | 20507.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 5812 | 5812 | 5812 | 5812 | 5812 | |
| 5° | 5842 | 5778 | 5797 | 5776 | 5767 | 554 |
| 15° | 5621 | 5563 | 5586 | 5566 | 5556 | 1586 |
| 25° | 5211 | 5147 | 5176 | 5121 | 5116 | 2398 |
| 35° | 4590 | 4536 | 4550 | 4490 | 4485 | 2865 |
| 45° | 3714 | 3665 | 3649 | 3584 | 3574 | 2845 |
| 55° | 2433 | 2394 | 2378 | 2338 | 2328 | 2180 |
| 65° | 1306 | 1297 | 1312 | 1302 | 1302 | 1323 |
| 75° | 706 | 706 | 706 | 711 | 711 | 745 |
| 85° | 180 | 190 | 200 | 200 | 200 | 210 |
| 90° | 3 | 12 | 21 | 26 | 26 | 12 |
| 95° | 65 | 240 | 765 | 333 | 224 | 69 |
| 105° | 212 | 330 | 1312 | 1998 | 1880 | 225 |
| 115° | 377 | 457 | 1051 | 2090 | 2381 | 372 |
| 125° | 518 | 590 | 950 | 1602 | 1889 | 462 |
| 135° | 624 | 693 | 924 | 1304 | 1471 | 482 |
| 145° | 721 | 773 | 912 | 1108 | 1192 | 453 |
| 155° | 815 | 844 | 906 | 995 | 1024 | 376 |
| 165° | 883 | 894 | 909 | 948 | 950 | 249 |
| 175° | 915 | 918 | 912 | 924 | 921 | 87 |
| 180° | 915 | 915 | 915 | 915 | 915 | |

TEST NUMBER: P564021

CATALOG NUMBER: SQ4-PR1-050U-125D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 5811.6 | 5811.6 | 5811.6 | 5811.6 | 5811.6 |
| 2.5° | 5847.7 | 5796.8 | 5811.6 | 5799.0 | 5771.6 |
| 5° | 5841.7 | 5778.1 | 5796.6 | 5776.4 | 5766.6 |
| 7.5° | 5796.6 | 5734.0 | 5752.6 | 5732.4 | 5726.5 |
| 10° | 5756.6 | 5697.8 | 5716.5 | 5696.3 | 5686.5 |
| 12.5° | 5712.5 | 5649.9 | 5672.5 | 5648.2 | 5638.4 |
| 15° | 5621.4 | 5562.7 | 5586.4 | 5566.1 | 5556.4 |
| 17.5° | 5521.3 | 5458.7 | 5482.3 | 5459.0 | 5446.2 |
| 20° | 5441.2 | 5382.5 | 5406.2 | 5371.0 | 5366.1 |
| 22.5° | 5353.1 | 5294.4 | 5318.1 | 5271.0 | 5270.0 |
| 25° | 5211.0 | 5147.3 | 5175.9 | 5120.7 | 5115.8 |
| 27.5° | 5041.8 | 4983.0 | 5006.7 | 4950.5 | 4944.7 |
| 30° | 4925.6 | 4866.9 | 4890.6 | 4830.3 | 4820.5 |
| 32.5° | 4793.5 | 4738.7 | 4758.4 | 4698.2 | 4692.4 |
| 35° | 4590.2 | 4536.4 | 4550.2 | 4490.0 | 4485.1 |
| 37.5° | 4359.0 | 4310.0 | 4317.9 | 4251.8 | 4246.9 |
| 40° | 4194.8 | 4145.9 | 4149.7 | 4079.6 | 4074.7 |
| 42.5° | 4014.6 | 3965.6 | 3961.5 | 3891.3 | 3886.4 |
| 45° | 3714.2 | 3665.3 | 3649.2 | 3583.9 | 3574.1 |
| 47.5° | 3371.9 | 3322.9 | 3292.8 | 3239.5 | 3232.7 |
| 50° | 3123.6 | 3074.6 | 3048.5 | 3003.1 | 2988.4 |
| 52.5° | 2855.3 | 2806.3 | 2784.2 | 2742.8 | 2728.1 |
| 55° | 2432.8 | 2393.6 | 2377.7 | 2337.5 | 2327.7 |
| 57.5° | 2031.3 | 2004.9 | 2000.3 | 1961.2 | 1957.2 |
| 60° | 1787.0 | 1772.4 | 1772.0 | 1737.0 | 1737.0 |
| 62.5° | 1578.8 | 1568.0 | 1575.8 | 1552.7 | 1548.8 |
| 65° | 1306.5 | 1296.7 | 1311.5 | 1301.5 | 1301.5 |
| 67.5° | 1091.2 | 1091.2 | 1100.3 | 1096.3 | 1096.3 |
| 70° | 971.1 | 971.1 | 976.1 | 976.1 | 976.1 |
| 72.5° | 863.0 | 859.1 | 872.0 | 871.9 | 868.0 |
| 75° | 705.8 | 705.8 | 705.8 | 710.8 | 710.8 |
| 77.5° | 549.6 | 550.6 | 554.6 | 553.5 | 549.6 |
| 80° | 445.5 | 450.4 | 450.5 | 445.5 | 445.5 |
| 82.5° | 341.4 | 346.3 | 346.4 | 345.3 | 341.4 |
| 85° | 180.2 | 190.0 | 200.2 | 200.2 | 200.2 |
| 87.5° | 52.6 | 70.0 | 84.2 | 85.3 | 81.4 |
| 90° | 2.9 | 11.6 | 20.6 | 26.5 | 26.5 |
| 92.5° | 26.5 | 120.3 | 208.9 | 89.7 | 75.9 |
| 95° | 64.7 | 240.3 | 765.1 | 333.0 | 223.7 |
| 97.5° | 107.1 | 265.4 | 1173.0 | 912.6 | 641.0 |
| 100° | 135.4 | 282.1 | 1297.8 | 1315.6 | 1062.4 |
| 102.5° | 163.6 | 298.9 | 1330.8 | 1627.0 | 1403.7 |
| 105° | 211.9 | 329.9 | 1312.5 | 1998.4 | 1880.5 |
| 107.5° | 261.9 | 366.1 | 1236.6 | 2190.2 | 2223.0 |
| 110° | 297.2 | 392.2 | 1180.1 | 2228.0 | 2369.0 |



TEST NUMBER: P564021

CATALOG NUMBER: SQ4-PR1-050U-125D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 327.8 | 418.2 | 1123.6 | 2196.7 | 2409.0 |
| 115° | 376.7 | 457.3 | 1050.6 | 2090.1 | 2380.8 |
| 117.5° | 422.6 | 499.7 | 1004.1 | 1939.1 | 2266.6 |
| 120° | 453.2 | 528.0 | 982.9 | 1837.8 | 2163.0 |
| 122.5° | 479.1 | 553.9 | 968.8 | 1736.3 | 2050.0 |
| 125° | 517.9 | 589.9 | 950.5 | 1601.6 | 1889.3 |
| 127.5° | 552.7 | 624.0 | 940.5 | 1499.4 | 1746.3 |
| 130° | 573.9 | 642.9 | 935.8 | 1435.3 | 1656.8 |
| 132.5° | 595.0 | 664.1 | 931.1 | 1380.5 | 1576.8 |
| 135° | 623.9 | 692.9 | 924.1 | 1304.5 | 1471.4 |
| 137.5° | 655.1 | 717.8 | 920.5 | 1237.4 | 1377.8 |
| 140° | 673.9 | 734.3 | 918.2 | 1194.7 | 1321.3 |
| 142.5° | 692.7 | 748.6 | 915.8 | 1161.3 | 1267.2 |
| 145° | 721.0 | 772.8 | 912.3 | 1108.4 | 1191.8 |
| 147.5° | 752.8 | 797.1 | 909.3 | 1066.8 | 1132.4 |
| 150° | 774.0 | 811.4 | 909.3 | 1042.9 | 1094.7 |
| 152.5° | 790.4 | 823.2 | 907.0 | 1021.5 | 1064.1 |
| 155° | 815.2 | 843.9 | 906.4 | 995.3 | 1024.1 |
| 157.5° | 839.3 | 861.7 | 906.4 | 977.5 | 999.4 |
| 160° | 853.4 | 873.6 | 906.4 | 965.6 | 982.9 |
| 162.5° | 867.5 | 883.1 | 908.7 | 956.1 | 968.8 |
| 165° | 882.9 | 894.4 | 909.3 | 947.7 | 950.5 |
| 167.5° | 898.7 | 904.5 | 912.3 | 937.6 | 939.9 |
| 170° | 903.5 | 909.2 | 912.3 | 932.9 | 932.9 |
| 172.5° | 908.2 | 911.6 | 912.3 | 928.2 | 928.2 |
| 175° | 915.2 | 918.1 | 912.3 | 924.0 | 921.1 |
| 177.5° | 917.6 | 917.6 | 910.5 | 919.8 | 915.2 |
| 180° | 915.2 | 915.2 | 915.2 | 915.2 | 915.2 |

(END OF REPORT)