

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: P562673

Luminaire Tested: **SQ4-PC3-050U-125D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562673  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PC3-050U-125D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19570.5 lumens  
Efficiency: N/A  
Efficacy: 117.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

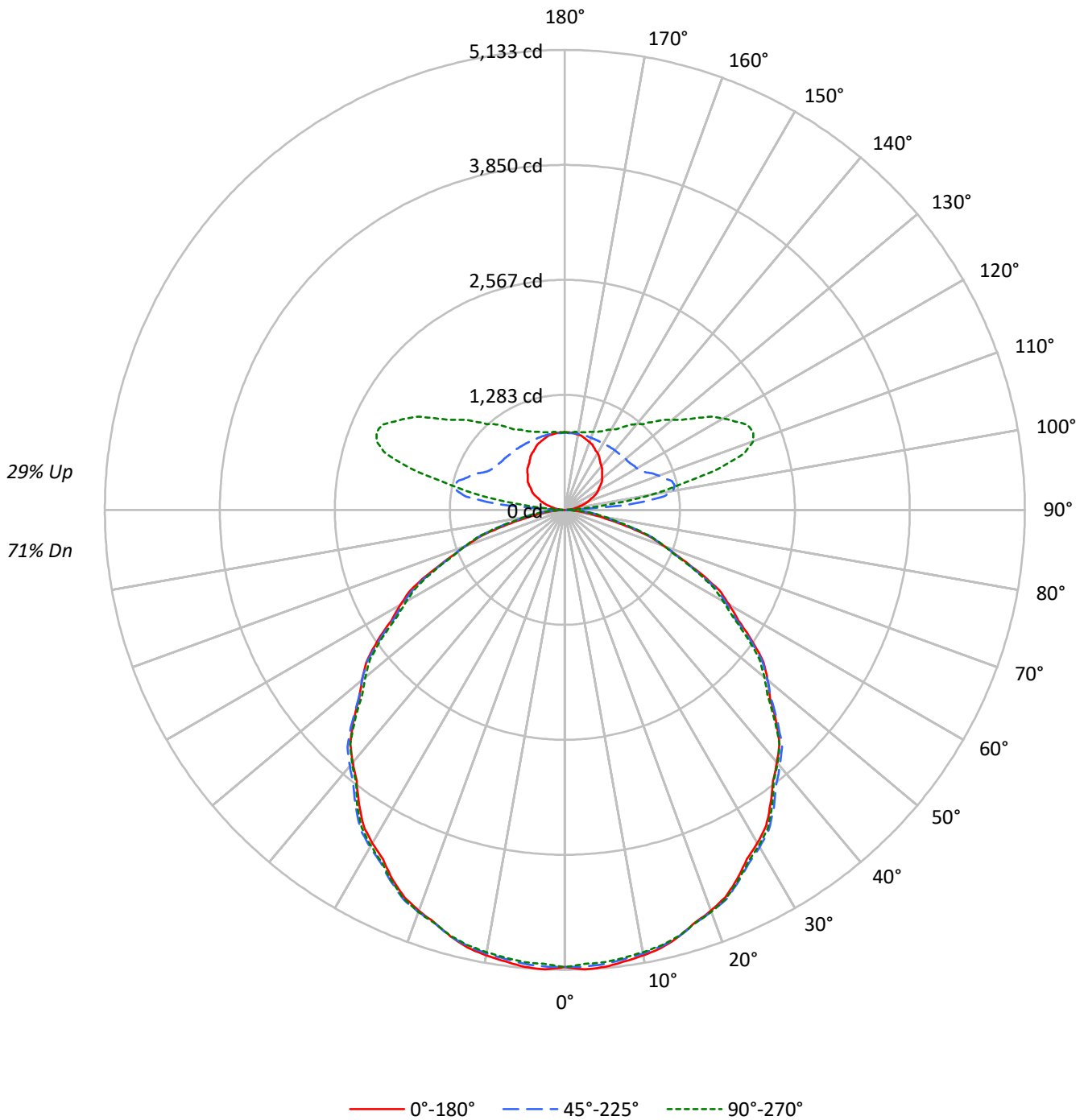
Input Watts (W): 167  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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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   | 112 | 112 | 112 | 112 | 106 | 106 | 106 | 106 | 95 | 95 | 95 | 85 | 85 | 85 | 76 | 76 | 76 | 71 |
| 1   | 103 | 98  | 94  | 91  | 97  | 93  | 90  | 86  | 84 | 81 | 79 | 75 | 73 | 71 | 67 | 65 | 64 | 60 |
| 2   | 93  | 86  | 79  | 74  | 88  | 81  | 76  | 71  | 73 | 69 | 65 | 66 | 62 | 59 | 59 | 56 | 54 | 50 |
| 3   | 85  | 75  | 68  | 62  | 80  | 72  | 65  | 59  | 65 | 59 | 55 | 58 | 54 | 50 | 52 | 49 | 46 | 43 |
| 4   | 78  | 67  | 59  | 52  | 74  | 64  | 56  | 50  | 58 | 51 | 47 | 52 | 47 | 43 | 47 | 43 | 40 | 37 |
| 5   | 72  | 60  | 51  | 45  | 68  | 57  | 49  | 43  | 52 | 45 | 40 | 47 | 41 | 37 | 42 | 38 | 34 | 32 |
| 6   | 66  | 54  | 45  | 39  | 62  | 51  | 43  | 38  | 46 | 40 | 35 | 42 | 37 | 33 | 38 | 34 | 30 | 28 |
| 7   | 61  | 48  | 40  | 34  | 58  | 46  | 39  | 33  | 42 | 36 | 31 | 38 | 33 | 29 | 35 | 30 | 27 | 25 |
| 8   | 57  | 44  | 36  | 30  | 54  | 42  | 35  | 30  | 39 | 32 | 28 | 35 | 30 | 26 | 32 | 27 | 24 | 22 |
| 9   | 53  | 40  | 33  | 27  | 50  | 39  | 31  | 26  | 35 | 29 | 25 | 32 | 27 | 23 | 29 | 25 | 22 | 20 |
| 10  | 50  | 37  | 30  | 25  | 47  | 36  | 29  | 24  | 33 | 27 | 22 | 30 | 25 | 21 | 27 | 23 | 20 | 18 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 15693 | 15693 | 15693 |
| 5°  | 15812 | 15710 | 15651 |
| 10° | 15773 | 15699 | 15655 |
| 15° | 15690 | 15690 | 15675 |
| 20° | 15587 | 15633 | 15633 |
| 25° | 15440 | 15552 | 15504 |
| 30° | 15252 | 15437 | 15369 |
| 35° | 15025 | 15256 | 15149 |
| 40° | 14777 | 14985 | 14834 |
| 45° | 14508 | 14611 | 14385 |
| 50° | 14129 | 14129 | 13903 |
| 55° | 13680 | 13503 | 13300 |
| 60° | 13019 | 12758 | 12554 |
| 65° | 12034 | 11793 | 11691 |
| 70° | 10537 | 10621 | 10579 |
| 75° | 8478  | 9376  | 9432  |
| 80° | 6025  | 7950  | 8033  |
| 85° | 3666  | 6669  | 6669  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 482.9   | 2.5       |
| 10°-20°   | 1385.9  | 7.1       |
| 20°-30°   | 2098.7  | 10.7      |
| 30°-40°   | 2516.1  | 12.9      |
| 40°-50°   | 2565.6  | 13.1      |
| 50°-60°   | 2239.6  | 11.4      |
| 60°-70°   | 1603.3  | 8.2       |
| 70°-80°   | 825.8   | 4.2       |
| 80°-90°   | 212.1   | 1.1       |
| 90°-100°  | 414.7   | 2.1       |
| 100°-110° | 1126.6  | 5.8       |
| 110°-120° | 1158.3  | 5.9       |
| 120°-130° | 926.1   | 4.7       |
| 130°-140° | 727.6   | 3.7       |
| 140°-150° | 557.9   | 2.9       |
| 150°-160° | 401.2   | 2.1       |
| 160°-170° | 245.4   | 1.3       |
| 170°-180° | 82.7    | 0.4       |
| 0°-30°    | 3967.5  | 20.3      |
| 0°-40°    | 6483.6  | 33.1      |
| 0°-60°    | 11288.7 | 57.7      |
| 0°-90°    | 13930.0 | 71.2      |
| 90°-120°  | 2699.5  | 13.8      |
| 90°-150°  | 4911.2  | 25.1      |
| 90°-180°  | 5640.0  | 28.8      |
| 0°-180°   | 19570.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 5103 | 5103  | 5103 | 5103  | 5103 |      |
| 5°   | 5122 | 5071  | 5089 | 5074  | 5070 | 486  |
| 15°  | 4928 | 4886  | 4928 | 4928  | 4923 | 1390 |
| 25°  | 4550 | 4518  | 4583 | 4569  | 4569 | 2094 |
| 35°  | 4002 | 3993  | 4063 | 4035  | 4035 | 2503 |
| 45°  | 3336 | 3326  | 3359 | 3317  | 3307 | 2568 |
| 55°  | 2551 | 2519  | 2518 | 2481  | 2481 | 2274 |
| 65°  | 1654 | 1617  | 1621 | 1606  | 1606 | 1636 |
| 75°  | 714  | 746   | 789  | 794   | 794  | 771  |
| 85°  | 104  | 159   | 189  | 194   | 189  | 141  |
| 90°  | 3    | 11    | 19   | 25    | 25   | 8    |
| 95°  | 61   | 227   | 722  | 314   | 211  | 65   |
| 105° | 200  | 311   | 1239 | 1886  | 1775 | 212  |
| 115° | 356  | 432   | 992  | 1973  | 2247 | 351  |
| 125° | 489  | 557   | 897  | 1512  | 1783 | 436  |
| 135° | 589  | 654   | 872  | 1231  | 1389 | 455  |
| 145° | 680  | 729   | 861  | 1046  | 1125 | 427  |
| 155° | 769  | 797   | 856  | 940   | 967  | 355  |
| 165° | 833  | 844   | 858  | 894   | 897  | 235  |
| 175° | 864  | 867   | 861  | 872   | 869  | 82   |
| 180° | 864  | 864   | 864  | 864   | 864  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 5102.9 | 5102.9 | 5102.9 | 5102.9 | 5102.9 |
| 2.5°   | 5133.1 | 5088.8 | 5102.9 | 5091.1 | 5072.6 |
| 5°     | 5121.8 | 5070.9 | 5088.7 | 5074.4 | 5069.8 |
| 7.5°   | 5084.9 | 5034.1 | 5057.5 | 5048.0 | 5043.3 |
| 10°    | 5050.9 | 5000.1 | 5027.3 | 5017.7 | 5013.1 |
| 12.5°  | 5005.5 | 4958.4 | 4989.5 | 4980.0 | 4979.1 |
| 15°    | 4928.0 | 4886.5 | 4928.0 | 4927.9 | 4923.3 |
| 17.5°  | 4830.7 | 4792.8 | 4837.3 | 4840.1 | 4837.3 |
| 20°    | 4762.7 | 4721.1 | 4776.8 | 4772.2 | 4776.8 |
| 22.5°  | 4679.5 | 4645.3 | 4705.0 | 4692.9 | 4697.5 |
| 25°    | 4550.1 | 4517.7 | 4583.1 | 4569.0 | 4569.0 |
| 27.5°  | 4397.0 | 4373.9 | 4445.2 | 4430.0 | 4430.0 |
| 30°    | 4294.9 | 4271.8 | 4346.9 | 4328.0 | 4328.0 |
| 32.5°  | 4181.5 | 4165.8 | 4237.3 | 4214.6 | 4214.6 |
| 35°    | 4002.0 | 3992.7 | 4063.4 | 4035.0 | 4035.0 |
| 37.5°  | 3816.8 | 3808.4 | 3872.5 | 3838.2 | 3827.1 |
| 40°    | 3680.7 | 3676.1 | 3732.7 | 3694.9 | 3694.9 |
| 42.5°  | 3544.6 | 3540.0 | 3589.0 | 3543.7 | 3543.7 |
| 45°    | 3335.8 | 3326.5 | 3359.4 | 3316.7 | 3307.4 |
| 47.5°  | 3108.0 | 3098.8 | 3119.4 | 3073.0 | 3068.3 |
| 50°    | 2953.0 | 2943.8 | 2953.0 | 2910.4 | 2905.8 |
| 52.5°  | 2794.3 | 2777.7 | 2779.2 | 2736.6 | 2735.7 |
| 55°    | 2551.4 | 2519.1 | 2518.4 | 2480.6 | 2480.6 |
| 57.5°  | 2294.4 | 2251.9 | 2255.7 | 2223.4 | 2218.8 |
| 60°    | 2116.7 | 2070.5 | 2074.2 | 2045.8 | 2041.1 |
| 62.5°  | 1942.9 | 1889.3 | 1900.3 | 1868.2 | 1867.3 |
| 65°    | 1653.7 | 1616.7 | 1620.6 | 1606.5 | 1606.5 |
| 67.5°  | 1375.9 | 1341.7 | 1366.4 | 1355.1 | 1354.1 |
| 70°    | 1171.8 | 1148.7 | 1181.2 | 1181.1 | 1176.5 |
| 72.5°  | 982.8  | 981.8  | 1022.5 | 1022.5 | 1025.3 |
| 75°    | 713.5  | 745.8  | 789.1  | 793.8  | 793.8  |
| 77.5°  | 476.3  | 533.6  | 581.2  | 583.0  | 582.1  |
| 80°    | 340.2  | 404.9  | 448.9  | 458.2  | 453.6  |
| 82.5°  | 230.6  | 298.9  | 335.5  | 344.8  | 340.2  |
| 85°    | 103.9  | 159.4  | 189.0  | 193.6  | 189.0  |
| 87.5°  | 30.8   | 65.7   | 79.5   | 80.4   | 73.0   |
| 90°    | 2.8    | 10.9   | 19.4   | 25.0   | 25.0   |
| 92.5°  | 25.0   | 113.5  | 197.2  | 84.7   | 71.7   |
| 95°    | 61.1   | 226.8  | 722.2  | 314.3  | 211.1  |
| 97.5°  | 101.1  | 250.5  | 1107.2 | 861.4  | 605.0  |
| 100°   | 127.8  | 266.3  | 1225.0 | 1241.8 | 1002.8 |
| 102.5° | 154.4  | 282.1  | 1256.1 | 1535.7 | 1325.0 |
| 105°   | 200.0  | 311.4  | 1238.9 | 1886.3 | 1775.0 |
| 107.5° | 247.2  | 345.5  | 1167.2 | 2067.3 | 2098.3 |
| 110°   | 280.6  | 370.2  | 1113.9 | 2103.0 | 2236.1 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 309.4 | 394.7 | 1060.5 | 2073.4 | 2273.8 |
| 115°   | 355.5 | 431.6 | 991.6  | 1972.9 | 2247.2 |
| 117.5° | 398.9 | 471.7 | 947.8  | 1830.3 | 2139.4 |
| 120°   | 427.8 | 498.4 | 927.8  | 1734.7 | 2041.6 |
| 122.5° | 452.2 | 522.8 | 914.4  | 1638.9 | 1935.0 |
| 125°   | 488.9 | 556.8 | 897.2  | 1511.7 | 1783.3 |
| 127.5° | 521.7 | 589.0 | 887.8  | 1415.3 | 1648.3 |
| 130°   | 541.7 | 606.8 | 883.3  | 1354.7 | 1563.9 |
| 132.5° | 561.7 | 626.8 | 878.9  | 1303.1 | 1488.3 |
| 135°   | 588.9 | 654.1 | 872.2  | 1231.3 | 1388.9 |
| 137.5° | 618.3 | 677.5 | 868.9  | 1168.0 | 1300.5 |
| 140°   | 636.1 | 693.1 | 866.6  | 1127.7 | 1247.2 |
| 142.5° | 653.9 | 706.6 | 864.4  | 1096.1 | 1196.1 |
| 145°   | 680.5 | 729.4 | 861.1  | 1046.2 | 1125.0 |
| 147.5° | 710.5 | 752.4 | 858.3  | 1006.9 | 1068.9 |
| 150°   | 730.5 | 765.8 | 858.3  | 984.4  | 1033.3 |
| 152.5° | 746.1 | 777.1 | 856.1  | 964.2  | 1004.4 |
| 155°   | 769.4 | 796.6 | 855.5  | 939.5  | 966.6  |
| 157.5° | 792.2 | 813.4 | 855.5  | 922.7  | 943.3  |
| 160°   | 805.5 | 824.6 | 855.5  | 911.5  | 927.8  |
| 162.5° | 818.9 | 833.5 | 857.8  | 902.5  | 914.4  |
| 165°   | 833.3 | 844.2 | 858.3  | 894.5  | 897.2  |
| 167.5° | 848.3 | 853.7 | 861.1  | 885.0  | 887.2  |
| 170°   | 852.8 | 858.2 | 861.1  | 880.5  | 880.5  |
| 172.5° | 857.2 | 860.5 | 861.1  | 876.1  | 876.1  |
| 175°   | 863.9 | 866.6 | 861.1  | 872.1  | 869.4  |
| 177.5° | 866.1 | 866.1 | 859.4  | 868.2  | 863.9  |
| 180°   | 863.9 | 863.9 | 863.9  | 863.9  | 863.9  |

(END OF REPORT)