

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: P564838

Luminaire Tested: **SQ4-PW1-0U-075D-835-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564838  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-0U-075D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

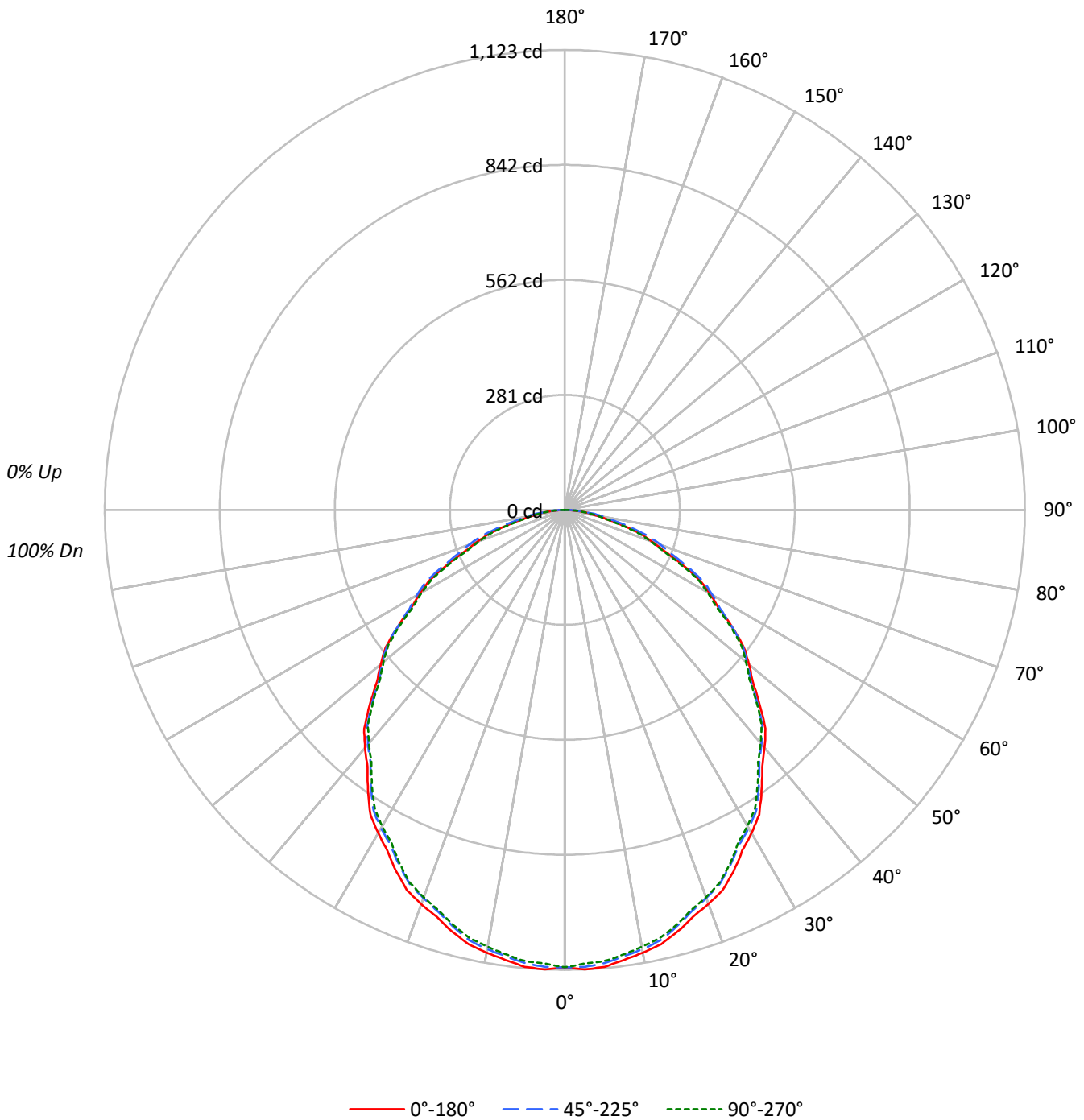
Lumens per Lamp: N/A  
Luminaire Lumens: 2841.7 lumens  
Efficiency: N/A  
Efficacy: 118.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 24  
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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |   |
| 1   | 109 | 105 | 101 | 97  | 107 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 89  | 91  | 89  | 87  | 85  |    |    |    |   |
| 2   | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 86  | 81  | 77  | 83  | 79  | 75  | 80  | 76  | 73  | 71  |    |    |    |   |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 66  | 63  | 60  |    |    |    |   |
| 4   | 84  | 72  | 63  | 57  | 81  | 71  | 63  | 56  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 58  | 54  | 52  |    |    |    |   |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  |    |    |    |   |
| 6   | 71  | 58  | 49  | 43  | 69  | 57  | 49  | 43  | 55  | 48  | 42  | 54  | 47  | 42  | 52  | 46  | 42  | 40  |    |    |    |   |
| 7   | 66  | 53  | 44  | 38  | 64  | 52  | 44  | 38  | 50  | 43  | 38  | 49  | 42  | 37  | 48  | 42  | 37  | 35  |    |    |    |   |
| 8   | 62  | 48  | 40  | 34  | 60  | 48  | 40  | 34  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 33  | 31  |    |    |    |   |
| 9   | 58  | 44  | 36  | 31  | 56  | 44  | 36  | 31  | 43  | 35  | 31  | 42  | 35  | 30  | 41  | 35  | 30  | 28  |    |    |    |   |
| 10  | 54  | 41  | 33  | 28  | 53  | 40  | 33  | 28  | 39  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  | 26  |    |    |    |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10305 | 10305 | 10305 |
| 5°  | 10372 | 10289 | 10244 |
| 10° | 10289 | 10206 | 10151 |
| 15° | 10179 | 10067 | 10029 |
| 20° | 10058 | 9904  | 9884  |
| 25° | 9917  | 9737  | 9708  |
| 30° | 9707  | 9562  | 9499  |
| 35° | 9432  | 9299  | 9244  |
| 40° | 9138  | 8996  | 8961  |
| 45° | 8782  | 8666  | 8629  |
| 50° | 8418  | 8348  | 8291  |
| 55° | 8025  | 8025  | 7898  |
| 60° | 7536  | 7682  | 7409  |
| 65° | 6896  | 7239  | 6724  |
| 70° | 6080  | 6663  | 5918  |
| 75° | 5190  | 5964  | 5051  |
| 80° | 4027  | 5021  | 4081  |
| 85° | 2604  | 3853  | 3440  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 105.2  | 3.7       |
| 10°-20°   | 296.9  | 10.4      |
| 20°-30°   | 440.5  | 15.5      |
| 30°-40°   | 515.4  | 18.1      |
| 40°-50°   | 513.1  | 18.1      |
| 50°-60°   | 443.1  | 15.6      |
| 60°-70°   | 318.9  | 11.2      |
| 70°-80°   | 167.2  | 5.9       |
| 80°-90°   | 41.5   | 1.5       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 842.6  | 29.6      |
| 0°-40°    | 1357.9 | 47.8      |
| 0°-60°    | 2314.1 | 81.4      |
| 0°-90°    | 2841.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2841.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1117 | 1117  | 1117 | 1117  | 1117 |      |
| 5°  | 1120 | 1107  | 1111 | 1108  | 1106 | 106  |
| 15° | 1066 | 1052  | 1054 | 1052  | 1050 | 300  |
| 25° | 974  | 958   | 956  | 951   | 954  | 448  |
| 35° | 837  | 826   | 826  | 818   | 821  | 524  |
| 45° | 673  | 667   | 664  | 662   | 661  | 519  |
| 55° | 499  | 498   | 499  | 492   | 491  | 445  |
| 65° | 316  | 326   | 332  | 319   | 308  | 313  |
| 75° | 146  | 159   | 167  | 156   | 142  | 156  |
| 85° | 25   | 32    | 36   | 34    | 32   | 33   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1116.9 | 1116.9 | 1116.9 | 1116.9 | 1116.9 |
| 2.5°  | 1123.2 | 1114.0 | 1116.9 | 1114.4 | 1109.0 |
| 5°    | 1119.9 | 1107.4 | 1111.0 | 1108.0 | 1106.1 |
| 7.5°  | 1108.4 | 1096.9 | 1099.6 | 1096.4 | 1095.3 |
| 10°   | 1098.2 | 1086.7 | 1089.4 | 1085.4 | 1083.5 |
| 12.5° | 1086.4 | 1074.1 | 1076.8 | 1072.8 | 1071.6 |
| 15°   | 1065.7 | 1052.3 | 1053.9 | 1051.9 | 1050.0 |
| 17.5° | 1041.7 | 1028.1 | 1028.3 | 1025.2 | 1024.8 |
| 20°   | 1024.4 | 1010.0 | 1008.7 | 1004.8 | 1006.7 |
| 22.5° | 1005.5 | 990.3  | 989.0  | 983.5  | 986.2  |
| 25°   | 974.2  | 957.9  | 956.5  | 950.7  | 953.6  |
| 27.5° | 938.0  | 921.8  | 921.9  | 913.7  | 916.8  |
| 30°   | 911.2  | 895.8  | 897.5  | 887.7  | 891.6  |
| 32.5° | 882.9  | 869.0  | 869.9  | 860.2  | 864.0  |
| 35°   | 837.4  | 825.9  | 825.6  | 817.8  | 820.7  |
| 37.5° | 791.0  | 780.8  | 779.2  | 774.7  | 775.4  |
| 40°   | 758.7  | 750.1  | 746.9  | 744.0  | 744.0  |
| 42.5° | 724.9  | 717.0  | 713.8  | 711.7  | 710.9  |
| 45°   | 673.1  | 667.3  | 664.2  | 662.3  | 661.3  |
| 47.5° | 621.9  | 616.5  | 613.9  | 612.5  | 611.5  |
| 50°   | 586.5  | 582.7  | 581.6  | 578.6  | 577.6  |
| 52.5° | 551.1  | 548.8  | 547.7  | 544.0  | 543.0  |
| 55°   | 498.9  | 498.0  | 498.9  | 492.0  | 491.0  |
| 57.5° | 444.6  | 446.1  | 449.3  | 440.0  | 437.7  |
| 60°   | 408.4  | 412.2  | 416.3  | 405.3  | 401.5  |
| 62.5° | 371.4  | 377.5  | 383.2  | 370.7  | 365.3  |
| 65°   | 315.9  | 325.5  | 331.6  | 318.6  | 308.0  |
| 67.5° | 262.4  | 274.3  | 281.6  | 267.6  | 255.7  |
| 70°   | 225.4  | 238.8  | 247.0  | 232.9  | 219.4  |
| 72.5° | 193.1  | 208.1  | 214.7  | 201.4  | 188.0  |
| 75°   | 145.6  | 159.1  | 167.3  | 156.1  | 141.7  |
| 77.5° | 103.3  | 116.0  | 122.8  | 113.1  | 101.2  |
| 80°   | 75.8   | 89.2   | 94.5   | 86.4   | 76.8   |
| 82.5° | 53.7   | 64.9   | 68.5   | 63.6   | 57.1   |
| 85°   | 24.6   | 32.3   | 36.4   | 34.4   | 32.5   |
| 87.5° | 6.3    | 11.7   | 15.0   | 15.0   | 15.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)