

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: P519317

Luminaire Tested: **SQ4-WB-0U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519317  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-0U-100D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

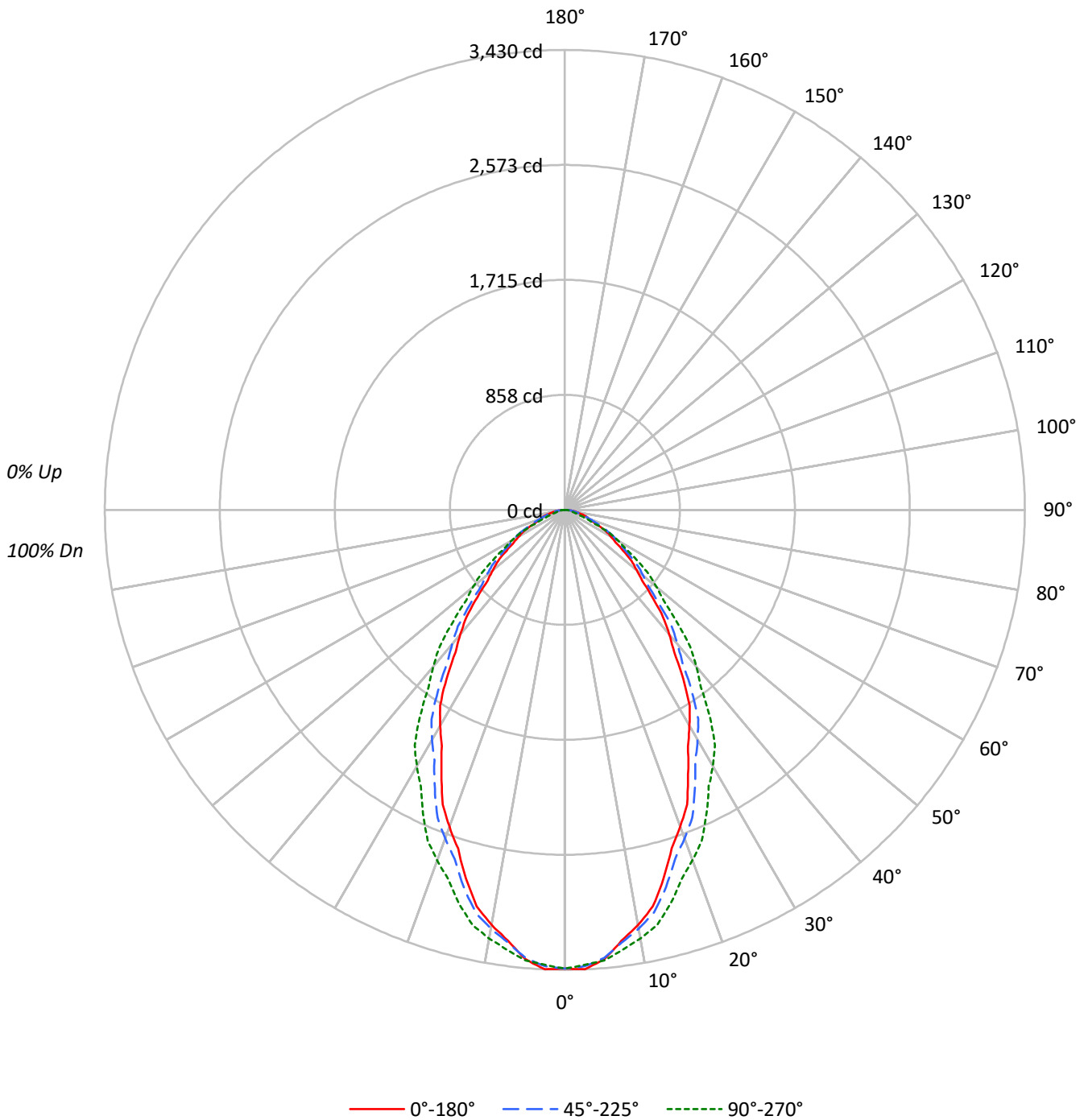
Lumens per Lamp: N/A  
Luminaire Lumens: 4985.2 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Direct

Input Watts (W): 55.3  
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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 99  | 101 | 99  | 96  | 97  | 95  | 93  | 94  | 92  | 91  | 89  |
| 2   | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 92  | 87  | 84  | 88  | 85  | 82  | 85  | 83  | 80  | 78  |
| 3   | 96  | 87  | 81  | 75  | 94  | 86  | 80  | 75  | 83  | 78  | 73  | 80  | 76  | 72  | 78  | 74  | 71  | 69  |
| 4   | 89  | 79  | 72  | 66  | 87  | 78  | 71  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 64  | 62  |
| 5   | 83  | 72  | 65  | 59  | 81  | 71  | 64  | 59  | 69  | 63  | 58  | 67  | 62  | 58  | 66  | 61  | 57  | 55  |
| 6   | 78  | 66  | 59  | 53  | 76  | 65  | 58  | 53  | 64  | 57  | 53  | 62  | 56  | 52  | 61  | 56  | 52  | 50  |
| 7   | 73  | 61  | 53  | 48  | 71  | 60  | 53  | 48  | 59  | 52  | 48  | 58  | 52  | 47  | 56  | 51  | 47  | 45  |
| 8   | 68  | 57  | 49  | 44  | 67  | 56  | 49  | 44  | 55  | 48  | 44  | 53  | 48  | 43  | 52  | 47  | 43  | 41  |
| 9   | 64  | 53  | 45  | 40  | 63  | 52  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 38  |
| 10  | 61  | 49  | 42  | 37  | 60  | 48  | 42  | 37  | 48  | 41  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 35  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 21043 | 21043 | 21043 |
| 5°  | 20780 | 20706 | 20827 |
| 10° | 19633 | 19811 | 20270 |
| 15° | 18124 | 18545 | 19377 |
| 20° | 16459 | 17077 | 18208 |
| 25° | 14762 | 15567 | 16963 |
| 30° | 13199 | 14063 | 15673 |
| 35° | 11542 | 12377 | 14146 |
| 40° | 9715  | 10486 | 12246 |
| 45° | 8017  | 8710  | 10224 |
| 50° | 6693  | 7297  | 8518  |
| 55° | 5682  | 6263  | 7035  |
| 60° | 4857  | 5429  | 5614  |
| 65° | 3867  | 4566  | 3627  |
| 70° | 3428  | 3564  | 2214  |
| 75° | 3175  | 2890  | 1355  |
| 80° | 2926  | 2660  | 1169  |
| 85° | 2646  | 2435  | 953   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 313.8  | 6.3       |
| 10°-20°   | 816.2  | 16.4      |
| 20°-30°   | 1057.2 | 21.2      |
| 30°-40°   | 1035.3 | 20.8      |
| 40°-50°   | 792.5  | 15.9      |
| 50°-60°   | 528.1  | 10.6      |
| 60°-70°   | 288.1  | 5.8       |
| 70°-80°   | 120.1  | 2.4       |
| 80°-90°   | 34.0   | 0.7       |
| 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°    | 2187.2 | 43.9      |
| 0°-40°    | 3222.5 | 64.6      |
| 0°-60°    | 4543.0 | 91.1      |
| 0°-90°    | 4985.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4985.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 3421 | 3421  | 3421 | 3421  | 3421 |      |
| 5°  | 3366 | 3332  | 3354 | 3361  | 3373 | 313  |
| 15° | 2846 | 2836  | 2912 | 2992  | 3043 | 795  |
| 25° | 2175 | 2181  | 2294 | 2394  | 2499 | 1000 |
| 35° | 1537 | 1544  | 1648 | 1759  | 1884 | 956  |
| 45° | 922  | 939   | 1001 | 1077  | 1175 | 719  |
| 55° | 530  | 552   | 584  | 606   | 656  | 480  |
| 65° | 266  | 288   | 314  | 274   | 249  | 276  |
| 75° | 134  | 134   | 122  | 84    | 57   | 143  |
| 85° | 38   | 38    | 34   | 22    | 14   | 43   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 3421.2 | 3421.2 | 3421.2 | 3421.2 | 3421.2 |
| 2.5°  | 3429.6 | 3399.0 | 3406.7 | 3406.5 | 3397.1 |
| 5°    | 3365.6 | 3331.9 | 3353.6 | 3361.4 | 3373.1 |
| 7.5°  | 3240.7 | 3215.2 | 3254.8 | 3284.2 | 3308.0 |
| 10°   | 3143.4 | 3121.4 | 3172.0 | 3214.7 | 3245.5 |
| 12.5° | 3030.6 | 3012.1 | 3074.7 | 3132.0 | 3172.3 |
| 15°   | 2846.2 | 2835.9 | 2912.3 | 2991.5 | 3042.9 |
| 17.5° | 2649.0 | 2644.0 | 2731.5 | 2824.0 | 2889.7 |
| 20°   | 2514.5 | 2513.0 | 2609.0 | 2705.3 | 2781.7 |
| 22.5° | 2378.7 | 2382.0 | 2482.9 | 2583.1 | 2670.0 |
| 25°   | 2175.2 | 2181.1 | 2293.8 | 2393.8 | 2499.4 |
| 27.5° | 1986.9 | 1989.6 | 2106.1 | 2211.7 | 2324.4 |
| 30°   | 1858.4 | 1865.8 | 1980.0 | 2089.3 | 2206.7 |
| 32.5° | 1729.9 | 1738.5 | 1850.3 | 1963.2 | 2083.0 |
| 35°   | 1537.2 | 1544.5 | 1648.3 | 1759.2 | 1884.0 |
| 37.5° | 1338.4 | 1348.4 | 1440.5 | 1545.4 | 1668.1 |
| 40°   | 1209.9 | 1224.6 | 1306.0 | 1404.8 | 1525.2 |
| 42.5° | 1086.2 | 1104.4 | 1179.9 | 1273.7 | 1382.3 |
| 45°   | 921.7  | 939.3  | 1001.3 | 1077.1 | 1175.4 |
| 47.5° | 780.0  | 800.3  | 847.9  | 913.1  | 997.1  |
| 50°   | 699.5  | 718.6  | 762.6  | 810.9  | 890.2  |
| 52.5° | 628.7  | 647.8  | 686.9  | 724.2  | 791.7  |
| 55°   | 529.9  | 551.9  | 584.0  | 606.1  | 656.0  |
| 57.5° | 448.8  | 470.0  | 495.4  | 505.4  | 535.6  |
| 60°   | 394.8  | 418.3  | 441.3  | 440.2  | 456.4  |
| 62.5° | 345.6  | 365.5  | 388.5  | 372.6  | 373.5  |
| 65°   | 265.7  | 287.7  | 313.7  | 274.1  | 249.2  |
| 67.5° | 214.7  | 219.4  | 246.2  | 191.2  | 161.5  |
| 70°   | 190.6  | 190.6  | 198.2  | 148.0  | 123.1  |
| 72.5° | 167.8  | 167.8  | 160.9  | 120.4  | 94.3   |
| 75°   | 133.6  | 133.6  | 121.6  | 83.5   | 57.0   |
| 77.5° | 103.0  | 101.8  | 93.1   | 62.3   | 41.4   |
| 80°   | 82.6   | 82.6   | 75.1   | 49.2   | 33.0   |
| 82.5° | 64.6   | 64.6   | 58.2   | 38.4   | 24.6   |
| 85°   | 37.5   | 37.5   | 34.5   | 22.3   | 13.5   |
| 87.5° | 13.2   | 13.2   | 12.0   | 7.2    | 6.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)