

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: P519611

Luminaire Tested: **SQ4-WB-150U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519611  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

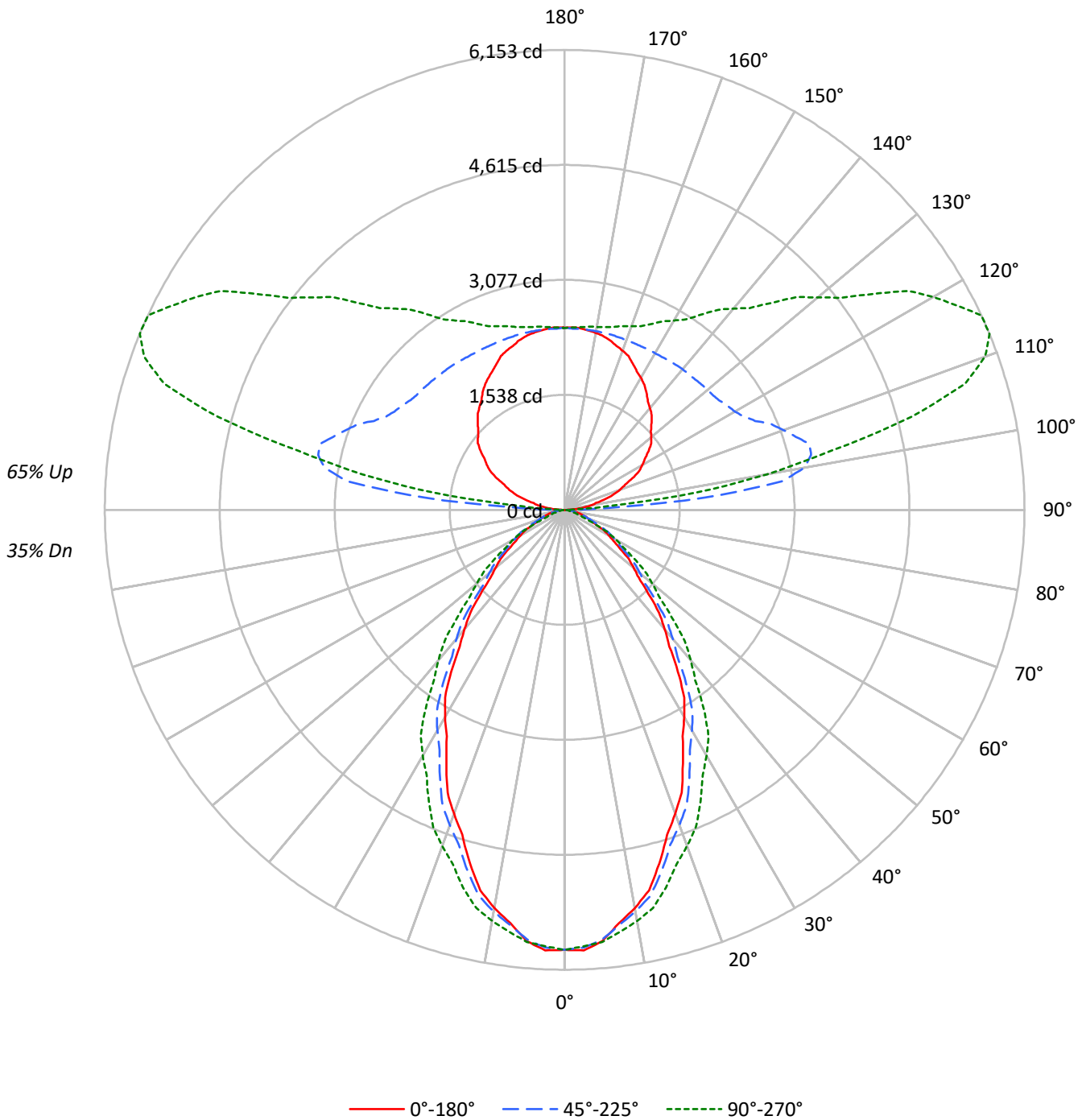
Lumens per Lamp: N/A  
Luminaire Lumens: 24284.6 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 223.7  
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   | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 75 | 75 | 75 | 58 | 58 | 58 | 43 | 43 | 43 | 35 |    |    |    |   |
| 1   | 95  | 91  | 88  | 85  | 86 | 83 | 80 | 77 | 67 | 65 | 63 | 52 | 51 | 50 | 39 | 38 | 38 | 31 |    |    |    |   |
| 2   | 87  | 81  | 75  | 71  | 79 | 73 | 69 | 65 | 60 | 56 | 54 | 47 | 45 | 43 | 35 | 34 | 33 | 28 |    |    |    |   |
| 3   | 80  | 72  | 65  | 60  | 73 | 65 | 60 | 55 | 53 | 49 | 46 | 42 | 40 | 37 | 32 | 30 | 29 | 24 |    |    |    |   |
| 4   | 74  | 64  | 57  | 51  | 67 | 58 | 52 | 47 | 48 | 44 | 40 | 38 | 35 | 33 | 29 | 27 | 26 | 22 |    |    |    |   |
| 5   | 68  | 57  | 50  | 44  | 62 | 53 | 46 | 41 | 43 | 39 | 35 | 35 | 31 | 29 | 27 | 25 | 23 | 20 |    |    |    |   |
| 6   | 63  | 52  | 44  | 39  | 57 | 47 | 41 | 36 | 39 | 35 | 31 | 32 | 28 | 26 | 25 | 22 | 21 | 18 |    |    |    |   |
| 7   | 58  | 47  | 40  | 34  | 53 | 43 | 37 | 32 | 36 | 31 | 28 | 29 | 26 | 23 | 23 | 20 | 19 | 16 |    |    |    |   |
| 8   | 54  | 43  | 36  | 31  | 49 | 39 | 33 | 29 | 33 | 28 | 25 | 27 | 23 | 21 | 21 | 19 | 17 | 15 |    |    |    |   |
| 9   | 51  | 39  | 32  | 27  | 46 | 36 | 30 | 26 | 30 | 26 | 22 | 25 | 21 | 19 | 20 | 17 | 16 | 13 |    |    |    |   |
| 10  | 47  | 36  | 29  | 25  | 43 | 33 | 27 | 23 | 28 | 23 | 20 | 23 | 20 | 17 | 18 | 16 | 14 | 12 |    |    |    |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 18102 | 18102 | 18102 |
| 5°  | 17876 | 17812 | 17916 |
| 10° | 16889 | 17042 | 17437 |
| 15° | 15591 | 15953 | 16668 |
| 20° | 14158 | 14691 | 15663 |
| 25° | 12699 | 13391 | 14592 |
| 30° | 11355 | 12097 | 13482 |
| 35° | 9929  | 10647 | 12169 |
| 40° | 8357  | 9021  | 10534 |
| 45° | 6897  | 7492  | 8796  |
| 50° | 5758  | 6277  | 7327  |
| 55° | 4888  | 5387  | 6051  |
| 60° | 4178  | 4670  | 4829  |
| 65° | 3326  | 3928  | 3120  |
| 70° | 2949  | 3065  | 1904  |
| 75° | 2732  | 2486  | 1166  |
| 80° | 2515  | 2286  | 1006  |
| 85° | 2279  | 2096  | 819   |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 539.9   | 2.2       |
| 10°-20°   | 1404.3  | 5.8       |
| 20°-30°   | 1818.9  | 7.5       |
| 30°-40°   | 1781.2  | 7.3       |
| 40°-50°   | 1363.4  | 5.6       |
| 50°-60°   | 908.5   | 3.7       |
| 60°-70°   | 495.8   | 2.0       |
| 70°-80°   | 206.6   | 0.9       |
| 80°-90°   | 63.6    | 0.3       |
| 90°-100°  | 1131.9  | 4.7       |
| 100°-110° | 3060.3  | 12.6      |
| 110°-120° | 3217.5  | 13.2      |
| 120°-130° | 2613.5  | 10.8      |
| 130°-140° | 2050.0  | 8.4       |
| 140°-150° | 1573.4  | 6.5       |
| 150°-160° | 1131.6  | 4.7       |
| 160°-170° | 691.3   | 2.8       |
| 170°-180° | 233.1   | 1.0       |
| 0°-30°    | 3763.1  | 15.5      |
| 0°-40°    | 5544.3  | 22.8      |
| 0°-60°    | 7816.2  | 32.2      |
| 0°-90°    | 8582.1  | 35.3      |
| 90°-120°  | 7409.7  | 30.5      |
| 90°-150°  | 13646.6 | 56.2      |
| 90°-180°  | 15703.0 | 64.7      |
| 0°-180°   | 24284.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 5886 | 5886  | 5886 | 5886  | 5886 |      |
| 5°   | 5790 | 5732  | 5770 | 5783  | 5803 | 539  |
| 15°  | 4897 | 4879  | 5010 | 5147  | 5235 | 1367 |
| 25°  | 3742 | 3752  | 3946 | 4118  | 4300 | 1721 |
| 35°  | 2645 | 2657  | 2836 | 3027  | 3241 | 1644 |
| 45°  | 1586 | 1616  | 1723 | 1853  | 2022 | 1237 |
| 55°  | 912  | 950   | 1005 | 1043  | 1129 | 827  |
| 65°  | 457  | 495   | 540  | 472   | 429  | 475  |
| 75°  | 230  | 230   | 209  | 144   | 98   | 245  |
| 85°  | 65   | 65    | 59   | 38    | 23   | 70   |
| 90°  | 5    | 16    | 34   | 37    | 34   | 15   |
| 95°  | 176  | 616   | 1882 | 974   | 579  | 184  |
| 105° | 569  | 879   | 3395 | 5008  | 4803 | 599  |
| 115° | 1002 | 1224  | 2816 | 5451  | 6153 | 989  |
| 125° | 1371 | 1571  | 2538 | 4282  | 5031 | 1222 |
| 135° | 1644 | 1839  | 2470 | 3458  | 3914 | 1270 |
| 145° | 1911 | 2055  | 2436 | 2960  | 3185 | 1196 |
| 155° | 2158 | 2242  | 2414 | 2655  | 2742 | 995  |
| 165° | 2349 | 2372  | 2425 | 2520  | 2532 | 662  |
| 175° | 2438 | 2436  | 2428 | 2459  | 2454 | 231  |
| 180° | 2436 | 2436  | 2436 | 2436  | 2436 |      |

TEST NUMBER: P519611

CATALOG NUMBER: SQ4-WB-150U-100D-935-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 5886.0 | 5886.0 | 5886.0 | 5886.0 | 5886.0 |
| 2.5°   | 5900.5 | 5847.9 | 5861.2 | 5860.8 | 5844.7 |
| 5°     | 5790.4 | 5732.4 | 5769.8 | 5783.2 | 5803.4 |
| 7.5°   | 5575.6 | 5531.6 | 5599.8 | 5650.4 | 5691.3 |
| 10°    | 5408.2 | 5370.3 | 5457.3 | 5530.8 | 5583.8 |
| 12.5°  | 5214.0 | 5182.2 | 5289.9 | 5388.6 | 5457.8 |
| 15°    | 4896.8 | 4879.1 | 5010.5 | 5146.8 | 5235.2 |
| 17.5°  | 4557.5 | 4548.9 | 4699.5 | 4858.6 | 4971.7 |
| 20°    | 4326.0 | 4323.5 | 4488.8 | 4654.5 | 4785.8 |
| 22.5°  | 4092.6 | 4098.1 | 4271.8 | 4444.1 | 4593.6 |
| 25°    | 3742.4 | 3752.5 | 3946.4 | 4118.4 | 4300.2 |
| 27.5°  | 3418.5 | 3423.0 | 3623.5 | 3805.1 | 3999.1 |
| 30°    | 3197.4 | 3210.0 | 3406.6 | 3594.6 | 3796.6 |
| 32.5°  | 2976.3 | 2991.0 | 3183.5 | 3377.7 | 3583.8 |
| 35°    | 2644.7 | 2657.3 | 2835.8 | 3026.7 | 3241.3 |
| 37.5°  | 2302.7 | 2319.9 | 2478.4 | 2658.8 | 2869.9 |
| 40°    | 2081.7 | 2106.9 | 2247.0 | 2417.0 | 2624.0 |
| 42.5°  | 1868.9 | 1900.2 | 2030.0 | 2191.3 | 2378.2 |
| 45°    | 1585.8 | 1616.1 | 1722.7 | 1853.1 | 2022.3 |
| 47.5°  | 1342.0 | 1376.8 | 1458.7 | 1571.0 | 1715.4 |
| 50°    | 1203.5 | 1236.4 | 1312.0 | 1395.2 | 1531.5 |
| 52.5°  | 1081.6 | 1114.5 | 1181.9 | 1246.0 | 1362.1 |
| 55°    | 911.7  | 949.6  | 1004.7 | 1042.8 | 1128.6 |
| 57.5°  | 772.2  | 808.6  | 852.3  | 869.5  | 921.5  |
| 60°    | 679.3  | 719.7  | 759.3  | 757.4  | 785.1  |
| 62.5°  | 594.5  | 628.9  | 668.4  | 641.1  | 642.6  |
| 65°    | 457.1  | 495.0  | 539.8  | 471.7  | 428.7  |
| 67.5°  | 369.3  | 377.4  | 423.6  | 328.9  | 277.9  |
| 70°    | 328.0  | 328.0  | 340.9  | 254.7  | 211.8  |
| 72.5°  | 288.7  | 288.7  | 276.9  | 207.1  | 162.2  |
| 75°    | 229.9  | 229.9  | 209.2  | 143.6  | 98.1   |
| 77.5°  | 177.2  | 175.2  | 160.1  | 107.1  | 71.3   |
| 80°    | 142.0  | 142.0  | 129.1  | 84.6   | 56.8   |
| 82.5°  | 111.1  | 111.1  | 100.2  | 66.1   | 42.4   |
| 85°    | 64.6   | 64.6   | 59.4   | 38.4   | 23.2   |
| 87.5°  | 23.8   | 25.8   | 27.5   | 19.7   | 17.1   |
| 90°    | 5.2    | 15.5   | 34.1   | 36.6   | 34.1   |
| 92.5°  | 74.5   | 271.3  | 535.3  | 232.4  | 168.3  |
| 95°    | 175.6  | 616.5  | 1882.3 | 974.1  | 579.4  |
| 97.5°  | 282.1  | 707.1  | 2934.1 | 2428.2 | 1783.2 |
| 100°   | 361.8  | 743.7  | 3261.3 | 3401.2 | 2750.1 |
| 102.5° | 435.2  | 794.6  | 3376.7 | 4139.0 | 3651.9 |
| 105°   | 568.9  | 879.1  | 3395.0 | 5007.9 | 4802.8 |
| 107.5° | 692.6  | 975.6  | 3246.6 | 5550.0 | 5618.1 |
| 110°   | 789.1  | 1045.4 | 3114.5 | 5695.5 | 5985.2 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 875.1  | 1115.0 | 2992.8 | 5666.4 | 6153.0 |
| 115°   | 1001.5 | 1224.5 | 2815.6 | 5450.6 | 6153.0 |
| 117.5° | 1125.2 | 1334.4 | 2698.7 | 5120.8 | 5917.0 |
| 120°   | 1200.7 | 1405.8 | 2629.5 | 4884.2 | 5696.8 |
| 122.5° | 1272.0 | 1473.0 | 2587.5 | 4630.6 | 5449.3 |
| 125°   | 1371.1 | 1571.1 | 2537.7 | 4282.4 | 5030.9 |
| 127.5° | 1462.3 | 1658.7 | 2508.4 | 3998.3 | 4656.5 |
| 130°   | 1512.7 | 1715.2 | 2495.8 | 3822.7 | 4417.4 |
| 132.5° | 1565.1 | 1765.6 | 2483.2 | 3664.4 | 4211.9 |
| 135°   | 1643.8 | 1838.6 | 2469.6 | 3457.8 | 3914.1 |
| 137.5° | 1722.9 | 1907.0 | 2458.0 | 3290.2 | 3661.9 |
| 140°   | 1777.5 | 1949.2 | 2453.8 | 3182.3 | 3513.0 |
| 142.5° | 1829.9 | 1991.4 | 2445.5 | 3084.9 | 3374.6 |
| 145°   | 1911.2 | 2054.7 | 2435.5 | 2959.7 | 3185.3 |
| 147.5° | 1985.1 | 2112.2 | 2424.0 | 2846.3 | 3019.6 |
| 150°   | 2039.6 | 2152.4 | 2419.8 | 2784.7 | 2923.1 |
| 152.5° | 2090.0 | 2188.4 | 2417.7 | 2727.5 | 2841.3 |
| 155°   | 2157.6 | 2242.2 | 2414.5 | 2655.1 | 2742.2 |
| 157.5° | 2227.9 | 2286.8 | 2415.0 | 2604.6 | 2662.0 |
| 160°   | 2267.7 | 2316.4 | 2417.1 | 2572.7 | 2613.8 |
| 162.5° | 2299.2 | 2339.7 | 2419.2 | 2547.3 | 2578.1 |
| 165°   | 2349.0 | 2372.0 | 2425.0 | 2519.7 | 2532.5 |
| 167.5° | 2383.1 | 2399.0 | 2425.5 | 2495.9 | 2502.1 |
| 170°   | 2404.0 | 2411.7 | 2427.6 | 2485.3 | 2485.3 |
| 172.5° | 2420.8 | 2422.3 | 2427.6 | 2472.7 | 2470.6 |
| 175°   | 2438.1 | 2435.5 | 2427.6 | 2459.0 | 2453.8 |
| 177.5° | 2443.9 | 2437.7 | 2427.1 | 2447.9 | 2441.8 |
| 180°   | 2435.5 | 2435.5 | 2435.5 | 2435.5 | 2435.5 |

(END OF REPORT)